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ABSTRACT

This document reports on a workshop which examined issues involved in psychoeducational assessment of non-English-speaking pupils. Attended by educators and psychologists, the workshop was held during June 1977 in Albany, New York. The major objective of the workshop was to provide assistance to school districts as they develop assessment methods which will guarantee protection of students when they are being evaluated. This protection is required by New York state legislation (Public Law 94-142). Six major conference papers are presented in the document. Topics discussed include the possibility of eventually achieving non-biased assessment, non-verbal communication among Puerto Ricans, a task analysis approach to assessing children of multicultural backgrounds, teacher/student relations in bicultural situations, African religions in the Caribbean, problems of bilingual Hispanic students, and environmental influences on educational achievement. A directory of participants and a colloquium agenda are included in the document. (DB)

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1979

PROCEEDINGS OF A MULTI-CULTURAL COLLOQUIUM ON NON-BIASED PUPIL ASSESSMENT

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June 9, 10, 11, 1977

at

Albany, New York

Sponsored by

Bureau of School Psychological and Social Services

Bilingual Education Unit

in cooperation with

Albany-Schoharie-Schenectady BOCES
Regional Planning Center

SP 011 464

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TABLE OF CONTENTS

	Page
The Workshop Design	1
Participant List	2
Consultant List	4
Agenda	5
"Non-Biased Assessment: Is It Possible? Linden D. Summers, Jr., Ph.D.	7
"Non-Verbal Communication Among Puertoricans Dr. Carmen Judith Nine-Curt	41
"Can We Learn By Their Mistakes: Assessment of Multi-Cultural Children Utilizing a Task Analysis Approach" Dr. Judith Kaufman	58
"The Preserved African Religions in the Caribbean: Voodoo, Santeria Vis-A-Vis Teacher-Student Relationship in Bilingual Bicultural Education" Mr. Henry Frank	70
"Practical Considerations in the Psychoeducational Assessment of Minority Children: The Case of Bilingual Hispanics" Ms. Maria D. Alvarez	79
"Adobe Radiation" Dr. Eloy R. Gonzales	117

THE WORKSHOP DESIGN

Purpose: The workshop was designed to assist professional staff members of school districts who are responsible for psycho-educational assessment of non-English dominant pupils conform to the "Protection in Evaluation Procedures" required by Public Law 94-142.

Objectives: 1) To study, in depth, the issues involved in psychoeducational assessment of non-English dominant pupils.

2) To discuss practical approaches to performing assessments on non-English dominant pupils.

Methodology: Directors of programs for the graduate preparation of school psychologists and school psychologists presently working in school districts in New York State were invited to attend the workshop. The workshop consisted of presentations from nationally renowned consultants and trainers (see agenda) and was designed to provide maximum interaction between consultants, trainers and participants in a setting that was dynamic and useful to the productivity.

A MULTI-CULTURAL COLLOQUIUM ON NON-BIASED PUPIL ASSESSMENT

June 9-11, 1977

Holiday Inn, Albany/Latham, New York

PARTICIPANT LIST

Jack M. Adler
School District #19

Miguel Alcayaga
School District #74

Ruth Alterman
Post Chester-Rye UFSD

H. Roberta Arrigo
School District #4

Violeta Ayala
Rochester City Schools

R. Batista
School District #9

Leon Laurence Bevans
School District #1

Robert Bonn
School District #20

Barbara Bonney
Middletown Enlarged S.D.

Josephine Bruno
School District #17

Michael Buscemi
West Babylon S.D.

Peter Byron
Buffalo Public Schools

A. Carranza
School District #17K

Edwin Collins
Buffalo Public Schools

Evelyn Colon-LaFontaine
School District #6

Arthur Connors
Rochester City Schools

Solomon Cook
Salmon River Central

Edmund Cortez
Queens, New York

Adelaide Crews
Ellenville Central

John B. Crowley
Elmont School District

C. Cruz
Buffalo Public Schools

Norman Czubaj
Jamestown Public Schools

Josephine Davidson
School District #19

Joakim deAraujo
Locust Valley S.D.

Lia DeAraujo
Locust Valley S.D.

Zulma Deitz
Buffalo Public Schools

Robert Dwyer
Jamestown Public School

Ida Echevarria
School District #8

Eileen Fitzgerald
Elwood School District

John P. Flynn
Nyack School District

Marilee Fossaceca
Syracuse City Schools

Ligia Davila Freidewald
School District #12

Minerva Gabriel
School District #4

Margaret Galante
Port Washington Public School

Anna Maria Gelmi
Mamaroneck Schools

Arlene Gilligan
Rockville Centre UFSD

Leland Goddard
Ossinging Schools

Thomas Godwin
Syracuse City School

Morton Goldberg
Schenectady City Schools

Myra Goodman
School District #29

Ida Grandenette
Locust Valley Schools

Marcia Guasp
School District #19k

Sonia Gulardo
School District #4

Hilda Gutierrez
School District #9

Phyllis Harris
Hewlett Woodmere S.D.

S. Hernandez
School District #9

John Hessel
Bay Shore Public Schools

Laura Hines
Bureau of Child Guidance

Aidalina Hochhauser
School District #27

Manuela Horowitz
Long Beach City Schools

Donald Howard
Harrison School District

Robert Howe
Rochester City Schools

Ramon Irizarri
School District #9

E. Olive Jennings
Albany City Schools

Susan Johnson
Wyandanch Public Schools

Robert Johnston
Salmon River Central Schools

Ruth Kahn
School District #1

Hugh Kailan
Deer Park School District

Mary Kalinowski
Locust Valley Central School

Ana Kaufman
School District #[illegible]

Thomas Kinnally
Wyandanch Public School

Jimmy Konno
Bureau of Child Guidance

Joseph Landry
Brentwood Public Schools

Dorothy Lansdowne
Bureau of Child Guidance

Josjephine Mare
Ellenville Central School

K. McCarthy
White Plains Public School

Participant List (continued)

Mike McColgan
School District #9

Aida Melendez
School District #12

Deloris Morris
Bureau of Child Guidance

Carolyn Morrison
N. Rockland School Dist.

Virginia Mrava
School District #32

Robert Nadal
Rochester City School

Doris Rodriguez-Natale
School District #99

Benedicta Nieves
Beacon City School Dist.

Flora O'Neill
NYC Board of Education

Anthony Orphandices
Locust Valley Central S.D.

Carmen Perez
School District #99

Mary Piels
School District #1

Dora Pillot
School District #12

Ursula Pnero
Rochester City Schools

Richard Placente
School District #23

Anthony Polemeni
NYC Board of Education

Elna Razran
School District #25

Ellen Regan
Bureau of Child Guidance

Olga Rico
Dunkirk Central Schools

Carmen Rivera
Buffalo City Schools

Olga Rivera
Rochester City Schools

Aracelis Rodriquez
School District #23

Candida Rodriguez
School District #9

Carmen Rodriquez
Buffalo City Schools

Roberto Rodriquez
Rochester City Schools

Irving Roggen
School District #16

Ethel Rosally
Yonkers School District

Joel Rosenshein
School District #8

Anne Rothman
Hewlett-Woodmere S.D.

John Ruska
Dunkirk Central Schools

William Russo
Valley Stream Central School

Robert Ruth
SChool District #26

Peter Sabino
Utica City Schools

Manuel Sanchez
School District #9

Helen Schlagel
School District

Ann Schneps
West Babylon School District

Burton Schucker
Bureau of Child Guidance

Marc Seidenstein
School District #22K

Ruth Sherman
Ossinging School District

Gertrude Sofer
School District #1

Martin Solomon
Valley Stream School District

Miriam Stepich
Bureau of Child Guidance

Walter Tanzer
Port Washington Schools

Elaine Thompson
School District #8

Leoncio Torres
Long Beach City Schools

Nina Traub
Ossining School District

Constantine Vagianos
New York City

Felix Vasquez
School District #15

Antonio Vega
School District #9

Nina Viola
Troy Enlarged School Dist.

J.M. Vocolo
Buffalo Public Schools

Stan Weingast
Ossining UFSD

Frances Weisser
School District #1

David Worl
Rochester City Schools

Silvia Zaluski
Yonkers Board of Education

Harvey Zeichner
School District #19

Barbara Jo Zimmer
School District #23

Nathan Zimmerman
Jamestown Public Schools

CONSULTANTS

Maria Alvarez
Columbia University
New York, New York

Lloyd Elm
U.S. Office of Indian Education
Washington, D.C.

Henry Frank
Caribbean Studies
New York, New York

Eloy Gonzalez
University of New Mexico
Albuquerque, New Mexico

Judith Kaufman
Yeshiva University
New York, New York

Bernard Karmel
New York Medical College
New York, New York

Herbert Kaye
State University of New York
Stoney Brook, New York

Judith Nine-Curt
University of Puerto Rico

Seymour Samuels
New Rochelle City School District
New Rochelle, New York

Linden Summers
Colgate University
Hamilton, New York

Robert Thatcher
New York Medical College
New York, New York

AGENDA

Wednesday, June 8, 1977

5:30 P.M. Registration

6:00 Dinner (Main Dining Room) Please wear name tags for identification

Thursday, June 9, 1977

7:00 A.M. Breakfast (Main Dining Room)

8:30 Welcoming Remarks and Introductions (Alpine #1)

H. FRANK RHYNER - Conference Coordinator, Associate Bureau of School Psychological and Social Services

JAMES MOORE - Director, Division School Health and Pupil Personnel Services

WILLIAM A. SIVERS - Chief, Bureau of School Psychological and Social Services

MARIA RAMIREZ - Coordinator Bilingual Educational Unit, Conference Chairperson

VIVIENNE ANDERSON - Acting Associate Commissioner for Instructional Services

9:00 1) "Non-Biased Assessment: Is It Possible?"
Linden D. Summers, Jr., Ph.D., Professor, Department of Education, Colgate University

10:15 Break

10:45 2) "Non-Verbal Communication Among Puertoricans"
Dr. Carmen Judith Nine-Curt, Professor of Education, University of Puerto Rico, Rio Piedra

12:00 Lunch (Main Dining Room) Buffet Style

1:45 P.M. 3) "Can We Learn By Their Mistakes: Assessment of Multi-Cultural Children Utilizing a Task Analysis Approach"
Dr. Judith Kaufman, Associate Professor, Psychology & Education Acting Director, School Psychology Program, Yeshiva University

4) "The Preserved African Religions in the Caribbean: Voodoo, Santeria Vis-A-Vis Teacher-Student Relationship in Bi-lingual Bicultural Education"
Mr Henry Frank, Assistant Coordinator, Caribbean Community Programs, The American Museum of Natural History New York

3:15 Break

3:45 3) and 4) repeat for alternate groups.

5:15 End of Day's Presentation

5:45 Cash Bar (Alpine #2)

7:00 Dinner (Main Dining Room)

Friday, June 10, 1978

7:30 A.M.	Breakfast (Main Dining Room)
9:00	5) "A Neurophysiological Method of Assessing Learning Abilities Using a Combination of the EEG and Computer. Implications for Minorities and others (Alpine #1) Herbert Kaye - Developmental Psuchologist, SUNY, Stonybrook New York Medical College Bernard Karmel - Developmental Neuropsychologist, New York Medical College, Brain Research Labs. Robert Thatcher - New York Medical College
10:30	Break
11:00	Continuation of above.
12:00 Noon	Lunch (Main Dining Room) Buffet Style
1:45 P.M.	6) "Practical Considerations in the Psychoeducational Assessment of Minority Children: The Case of Bilingual Hispanics" Ms. Maria D. Alvarez - Senior Program Associate, The Institute for Urban & Minority Education, Teachers College, Columbia University
	7) "Legal Implications of Adobe Radiation (Alpine #2) Eloy Gonzalez - Professor of Special Education, University of New Mexico, Albuquerque
3:15	Break
3:45	6) and 7) repeat for alternate groups.
5:15	End of Day's Presentation
5:45	Cocktail Party (Alpine #2)
7:00	Dinner (Main Dining Room)

Saturday, June 11, 1977

7:30 A.M.	Breakfast (Main Dining Room)
9:00	8) "A Native American Educator's Talk About Assessment & the Promises of the Future" (Alpine #1) Lloyd Elm - Education Program Specialist, Office of Indian Education, Washington, D.C.
10:00	Break
10:30	Panel Presentation of Reactions to the Colloquium (Alpine #1) Moderated by Michael Mattioli - Coordinator, School Psychological Services, Commonwealth of Pennsylvania, Harrisburg Panel Members: Seymour Samuels - Director of Pupil Personnel Services, New Rochelle S.D. Three others to be selected from participants
12:00 Noon	Lunch and Adjournment (Main Dining Room)

"Non-Biased Assessment: Is It Possible?"*

Linden D. Summers, Jr., Ph.D.

Colgate University

I have never been in jail. Ch I have been inside jails on several occasions: to see patients of mine or to evaluate prisoners before a hearing or sentencing - and even, on one or two occasions, to visit a friend in jail. But I have never, involuntarily, spent any time in one. I would judge that, with this audience, I'm in similar company; how many of you have spent - against your will - any time locked up, behind bars? Not held in the precinct office or waiting around for someone to bring down money for a fine, but actually back there in the slammer? Well, neither have I.

Nor was I - when I should have been - on any Freedom Ride in the South back in the fifties.... and I wasn't in Selma, Alabama when I should have been. Those are all gaps - serious deficiencies in my education and training, both as a human being and as a professional. I am not proud of the fact that when busses were burning in the deep South I sat with friends on pleasant porches in the deep North and talked. Nor am I proud of the fact that as a boy, going to school on street cars in Baltimore, I would stand up rather than sit in a seat beside a black person.

How crippling those deficiencies are, I will leave to you to judge - but I have to add - to balance the picture - that I am proud of my track record since then. As early as 1963 I was an outspoken opponent of the Vietnam War; I participated in Peace Marches, silent vigils and demonstrations against that war and the draft; I've been in sit-ins which jeopardized my professional career. One of the major disappointments in my life has been that I never made the Nixon White House "Enemies List"; it was certainly not for a lack of passion. Since 1948 - which is to say, ever since I first heard of him - I detested the man, seeing in him

*An address delivered at the opening session of a New York State Education Department-sponsored "Multi-Cultural Colloquium on Non-Biased Pupil Assessment," Albany, N.Y., June 9, 1977.

a perverse caricature of the best qualities of our society. Subsequent events have validated that insight. It's a continuing embarrassment to me that scorn and loathing alone didn't qualify me for entry on that list, but I have come to realize that mere intensity of feeling is a credential of limited value. In sum, I think I've learned how to speak out and to use effectively whatever influence I have - on issues of human and civil rights, and in matters of conscience. But...

The fact remains that I am a member of a privileged class in this society: white - even Southern (by heritage and birth if not by current residence) - well-educated, a licensed professional, a university professor and - some might add this credential - old, or at least middle-aged and well over 30. Any or all of those characteristics may automatically, irrevocably disqualify me, discrediting or at least discounting what I am about to say about assessment. I am, I forewarn you, going to argue strongly against further moratoria on testing; I am going to accuse test users of an ignorance if not willful, at least bordering on malpractice and I'm going to urge abandoning ideological blinders, fantasies and shoddy thinking. In short, my comments will come down even more heavily against incompetence in practice than against bias in instruments.

Some of you may not like that. You may reject my commentary as slick, dangerous, even vicious, dismissing me as a WASP racist. I hope not, for I know that's not true. As I said at the start; it <u>is</u> true that I have never been in jail. Though I believe I know a lot about the defects of jails and of some jailers and I understand much of the philosophy and the principles which explain the failures of our penal system, I do not - on those counts - consider myself a penologist or criminologist. But when it comes to matters of assessments, I <u>am</u> knowledgeable, informed, well-practiced and well-read; in short, in dealing with tests and measurement, I am an expert. And I believe it's wrong-seriously wrong - to dismiss or discount what I have to say

because of the accidents of skin color or social class, even though I'm painfully aware both variables are over-riding influences.

Of course I don't know everything. I don't even try to read articles in PHYCHOMETRIKA; quite frequently I'm stumped by statistics or by questions my students ask me. And I have no satisfactory explanation for why a ninth grade girl's reading scores are 4.3 in vocabulary, 8.3 in speed and 12.4 in comprehension. Just as others, I have puzzled-without satisfactory answers - over reasons for the continuing decline in SAT scores over the past decade.

But, I could review a truly polgnant array of illustrations confirming that "test anxiety" is real and very influential in depressing test scores. I have read all of Jensen's 1969 paper on IQ[1]* in the HARVARD EDUCATIONAL REVIEW - "How Much Can We Boost IQ and Student Achievement" - some 117 pages of it - (though I do not understand parts of it) and everything I could find related to that issue.[2] I find no more value or insight in that study than I find in most of the literature in educational psychology but I would still argue that Arthur Jensen's other efforts[3] to identify characteristics of learners which offer leads to instruction - are responsible and potentially useful.

"To identify characteristics of learners which offer leads to instruction..." That phrase helps focus on what I want to discuss. There is vastly more to education than "characteristics of learners" but given a finite limit of time - you will only be assembled here 'til Saturday noon and I can't pre-empt all of those intervening fifty-one hours - permit me a deliberate restriction of the field of assessment to measures which purport to identify learner characteristics. I mean to talk about those tests which "measure maximum performance."[4] I utilize here Lee Cronbach's simple but useful classification, with two broad categories:

*Notes and References will be found at the end

tests of maximum performance

and

tests of typical performance.

As he differentiates the two, the former tests are used when we wish to know how well the person can perform at his best; the second category includes those tests that seek to determine what he is likely to do in a given situation; personality tests or interest inventories are tests of typical performance. No absolute distinctions are implied; this is merely a practical way of differentiating tests by their principal purpose; the area I will be examining includes most of the instruments we think of as tests of ability.

The examples and illustrations in the discussion to follow will draw on familiar tests, mostly what we popularly call "IQ tests" and "achievement tests." Again, time is the determining element in limiting both the scope and depth of these remarks. I want to discuss five topics: first, some brief musings about the "rules of the game," next, an analogy setting test results into what I believe to be a useful perspective, followed by a very brief illustration of how hard it is to use test results clearly, honestly and helpfully. My fourth topic is a discussion in some detail of an alternative to testing as a means of assessment. Finally, a personal view of IQ as that score relates to the broader issues of non-biased assessment.

My answer, to the title question, "Non-biased Assessment: Is it Possible?" is negative, as you may have already discerned. But, then, I don't believe non-biased anything is possible. No intent there to finesse or trivialize the issue; we may disagree on whether tests are useful but we won't disagree that the test user is IMPORTANT. How we educate her or him - to give tests with great care, caution, even awe, to use results respectful to their impact though not in awe of the scores themselves, to allow the test results and the consumer to speak fully to one another - these are our mutual objectives whether the data flow from tests or from intuition with knowledge, skill and a vast store of psychological sensitivity we may be able to improve on the poor performances which have, historically, characterized all aspects of testing.

To improve performance by some small attempts at enhancing understanding and knowledge is my goal here this morning. My own interests in tests and measurements, in assessment, is pragmatic not theoretical. In the five topics chosen, I will try to move from some basic "rules of the road" through some nuts-and-bolts procedures and even presume to offer minor tactical advice. Finally in my remarks about IQ testing - somewhat autobiographical in source - I will venture broader musings about more philosophical goals. But I see all of this as technology; perhaps it surges at points into high technology; I'll leave that judgment to you. I do hope the practical applications are more obvious.

To start with the ground rules, let me return to Cronbach for a theme. In the Preface to the third edition of his ESSENTIALS OF PSYCHOLOGICAL TESTING he expresses a strong conviction that "the things actuarially-scored tests cannot do are much more important than the things they can do...." (p. xxviii). Nonetheless, he boldly asserts that "present tests, in the hands of qualified users, make valuable social and personal contributions.... (of an even greater impact) if we can shift to an allocation model and use test procedures to pick the educational, therapeutic or other approach that promises best results for the individual" (p. xxix).

The choice: to test or not to test isn't always a simple one nor is it always a personal one. But even if that choice - to test - is forced on us against our own wishes the next step in that chain of decisions is one within our own control and a clear professional, ethical and social obligation. If we are to use tests, we owe to all concerned a use that assures maximum value. From the initial pondering of "why test?" or "test for what?" through instrument selection; preparation, of both materials and clientele; on through administration and scoring to the ultimate objective; translating that psychometric code data into real world applicability; all of these steps are to be governed not by ideology or personal preference, but by ACCEPTED procedures and practices. In short, once the die is cast, the professional tester must put aside his or her predilictions and go by the rules.

There's little new or profound in those observations but every survey I'm aware of indicates that testing practice seldom conforms to those ground rules. That variations in the administration of standardized tests risk invalidating results is so well known as to be a cliche...but examiners still act as if a group test administration is a site for creative interaction! Despite the fact that a group test setting is a form of social gathering, we frequently ignore such common courtesies as explanations of purpose or efforts to create a comfortable "climate." Recall Cronbach's definition; such tests are designed to elicit our subjects' maximum performances. They are not training exercises for a Spartan noviate.

The record is anything but clear, too, that explanations for testing and follow-up efforts at de-briefing are at all regular routines. I'm sure each of you can match the "cases" I can cite in which the most pro-social, humanistically-oriented educator or psychologist has violated, in a testing situation, those very tenets of behavior which he publicly professes as principles governing his professional behavior. But we tolerate such professional misbehavior.

If our own personal professional judgment is violated by the testing situation, the clear but difficult choice is obvious; we must not enter into it. Those reporting to the test as subjects deserve a fate better than scapegoats for our incapacity to make our professional worlds fit our own preconceptions. "Primum noli nocere" ("First, do no harm") is a classic medical dictum; it's a principal we would do well to observe.

So far, I've dealt only with the software, so to speak, of testing. If our performance there is uneven, professional handling of the hard technology of testing - rigorous test selection, careful, clear and helpful utilization of test findings - is so incompetent as to border on actionable malpractice. Again, I'm sure your experience is amply supplied with illustrations but I will indulge in recording a few examples of the rampant ignorance which informs test use. The favorite

- so well known it's caricatured everywhere - is to give tests, send 'em off for scoring and then FILE the results unexamined and unused. Ironically, that misapplication may be a service; better the scores be buried than distorted or mangled by persons too incompetent or too uncaring to make effective use of them. But there are a number of other failures also attributable to professional ignorance.

For instance, the teacher who does not know the distinction between raw scores and percentiles. That may not be his fault; teachers, after all, are not expected to be qualified as test experts. But that "gap" in professional knowledge could be reduced if someone along the line responded to the obligation to inform every consumer of test results about their purpose and meaning. That is, if that someone had the requisite knowledge and the skill to share it effectively.

Aye, there's the rub. Seldom does that level of professional competence exist. Perhaps that widespread level of professional incompetence is the best argument for barring tests; if we can't - or won't - master the basic skills in utilizing test data, then we shouldn't be using such instruments.

And the evidence abounds that such competence is not a widely-held commodity. I'm strongly suspicious that a pernicious admixture of professional ineptitude and the lack of standards of conduct - professional unaccountability, if you will - is a major dynamic undergirding the "anti-testing" ideology which is so widely proclaimed.(5) There are substantial bases from which to criticize some - perhaps many - tests as ill-conceived and unsuitable. We have, for instance, the powerfully convincing arguments of George Jackson, Robert L. Williams and others from the Association of Black Psychologists, or J.P. Mercer's rigorous study of the defects in a mindless application of routine testing with minority ethnic groups and Ernest Bernal's compelling critique of conventional testing procedures - all of which should serve to refute any argument that tests appropriate to one context can be uncritically selected for use in markedly different circumstances.(6)

The same cautions are spelled out in the American Psychological Association's STANDARDS FOR EDUCATIONAL AND PSYCHOLOGICAL TESTS AND MANUALS.[7] But who among us assumes responsibility to know about such matters? Isn't it simpler to cry out about the abuses of testing than to engage in the rigorous study of the sources of such abuse? Professional responsibility, it seems to me, dictates that the proponent of abandoning testing spend the hours necessary to master the issues, to weigh the eivdence before merely accepting an easy position. As the APA's report on "Educational Uses of Tests With Disadvantaged Students" indicated, "banning tests will not ban carelessness, insensitivity or ignorance from schools..." "Test misuse," the authors of that report point out, "is only one symptom of more basic difficulty" (p.22).

One further airing of a complaint about basic practices before I go on to my second topic. In current educational measurement talk, competency-based performance, proficiency and criterion-referenced (vs. norm-referenced) testing are "in words." In a "Special Feature on Testing" in a recent issue of TODAY'S EDUCATION,[8] the lead article asserts flatly that "the schools and colleges of America should not use group-administered norm-referenced standardized intelligence, aptitude, and achievement tests" (McKenna, p. 38). I lean in that direction, too. But I don't believe many of his readers know what he's talking about when the author suggests criterion-referenced tests as one of the several alternatives. Nor does he offer any explanation to help his reader understand what a criterion-referenced test is, how to construct one nor how to use it to avoid the evils of those standardized tests. My initial impulse was to dismiss his critique as political; that cynical view was only slightly attenuated when I read, several pages later, this description of criterion-referenced tests in a compliation of alternatives to group standardized testing:

> The potential advantage of these tests over standardized tests is that the students are judged on their mastery of objectives rather than on their standing in relation to others. In this way, they serve some diagnostic purposes.

So far, so good....but then these statements follow:

> At this time, these tests have not had wide enough use to confirm fully their value, particularly when broad subject areas must be considered. If the original intention of criterion-referenced tests is not distorted, they have great potential as an alternative to standardized tests (p. 55).

Of course I'll add, if standardized tests are not distorted, they too, have great potential. Tests, I fear, face the same fate G.K. Chesterton predicted for Christianity: "It is not that it will be tried and found wanting, but that it won't be tried."

The fault, to paraphrase another British writer, lies not in the tests but in ourselves. One simple corrective for that misuse is my second topic. To explain it, I'll have to introduce some of my own background. Prior to coming to Colgate most of my professional career was spent in teaching hospitals. Despite misgivings about how medicine handles other issues, I remain impressed with the rigorous introduction it provides to increasing levels of responsibility. Equally admirable is the mastery at each level of requisite knowledge and skill. A physician-to-be learns, as we know, an awful lot; he practices what he has learned constantly and that practice is rigorously supervised by a hierarchy which expects a high level of performance. No second year medical student serving as a ward clerk would dare be ignorant of normal ranges of blood sugar or of normal white cell counts, though it's unlikely that lowly clerk would ever be in a position where she or he would be solely responsible for a decision based on abnormal readings of either. Contrast that situation with the rampant psychometric ignorance, even at the highest levels of professional responsibility in education. Perhaps now you can sense why I suspect the move to throw out all standardized testing may not arise from a carefully-considered, fully-informed base.

But my purpose in this brief allusion to medicine is not merely a cheap shot at the level of professional competence in education. Rather, I want to suggest we borrow, directly, the medical view of the use and significance of laboratory data. Again and again, I've been impressed, when an attending physician on ward rounds ponders out loud the conflict in data from a laboratory study and the clinical evidence he observes before him on the bed or from the history. In that balancing and weighing I find a precedent I believe we can use. In the example I'm describing, the physician's response is not an implusive rejection of these lab data which don't fit the evidence at hand. Finally, reject he might but only after a careful re-assay of what he sees and what he knows. Of course, when - as it usually does- the laboratory data and the clinical picture are congruent, he reads the data as supporting or reaffirming. But the true value of those data comes then they "don't fit." Now he must re-examine the hard evidence: the history, the physical examination findings and the patient's current clincial status, his own formulation of the case. Further, available to him if he needs such resources, are peers and consultant specialists. The "reappraisal" may be prolonged or almost instantaneous - "The lab glassware must be dirty today" - but that review is, nonetheless, prompted by the incongruence.

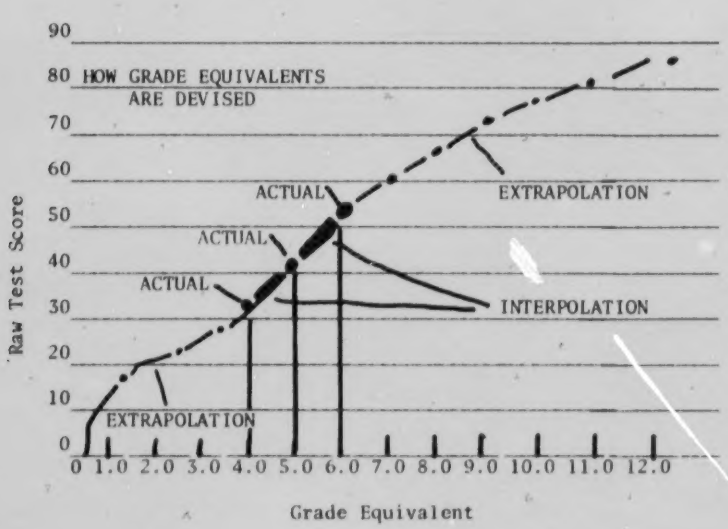
I don't think I need to belabor the point; you can see the analogy. Can we not shrink down to appropriate size, the data we collect, to have scores serve not as sacred scriptures from a test scoring print-out but as laboratory results, an adjunct to our own professional wisdom and decision-making? Test scores could - and should - fill that corrective, reinforcing role if we took seriously enough their realistic potency, neither venerating them nor dismissing them out-of-hand.

Topic number three is a quick and dirty sample of what there is of value out there for us in the psychometric terra icognita . Rather than an imposing textbook, my source for this is the Spring Survey of Education (Section 12) of the May 1st Sunday TIMES.(9) You may recall that

28-page supplement featured the testing controversy, devoting over two-thirds of the column space to a serious, informed examination of virtually every aspect of educational testing. Consistent with THE TIMES's zealous fairmindness, ample space was provided for an essay defending tests. Well inside - on page 19 - was an unsigned piece that caught my eye: "Misleading Data." (10) It was about Grade Equivalents as a means of reporting test scores. How many of you know - really know - what a grade equivalent is? Take ten seconds to formulate a precise definition.... Now, a few seconds more to formulate how you would explain to the parent of a fifth grade boy what it means that his math score's Grade Equivalent is 10.0? Should he be in 10th grade math? Why or why not?

"On the surface," the apparently anonymous writer says, "the grade equivalent seems marvelously simple.... So parents, and even teachers assume that when a bright third grader scores 5.1 on a reading test he can read what is taught in fifth grade." Of course you and I know better. But if you're having difficulty formulating exactly what a grade equivalent score does mean, perhaps this table will help. (See Figure 1, below.)

Figure 1: How Grade Equivalents Are Devised



from: "Spring Survey of Education: (Section 12), NEW YORK TIMES, 1 May 77, p. 18.

20

I thought the article was superb. Although it took the writer 587 words, as opposed to Cronbach's mere 418 to clarify the meaning, I believe THE TIMES's explanation is better than Cronbach's.

Oh yes..... Does the third grader's 5.1 Grade Equivalent mean he can read what is taught in fifth grade? Not at all; the Grade Equivalent score of 5.1 says our third grader scored what a typical fifth grader would have scored had he taken that third grade test!

Now, before I move to Topic #4, a brief, provocative challenge to apply this scoring concept. According to an AP dispatch (11) appearing in our local paper earlier this month, one of Chicago's local District Superintendents decided to keep better than a third of that school district's eighth graders back in eighth grade until they achieved at least a 6.5 Reading Grade Equivalent score on the Iowa Test of Basic Skills. 678 of 1,289 had failed to score 6.5 or higher. While the national norm at the end of Grade 8 is 9.8, last year the Chicago city-wide average grade equivalent was 6.8.

The sixteen schools of the district are predominantly black. The superintendent feels confident he has the parents with him; the district is providing a "Prep Center" to aid students and Dr. Briggs, the superintendent, believes that his "Project Higher Achievement" has already affected both attitude changes and some concrete advances in academic performance.

That's all I know of the matter. If the AP story is correct, the district has found a way to make the test data serve a function: to help those concerned assess progress toward a goal all of us would honor; reading competence at a level beyond mere functional literacy.

Your "task" - a purely mental exercise - is to decide whether the value you see in the grade equivalent data, isn't it better to have some substantive data to provide a guideline for all parties - in contrast to the circumstance where a high school graduate now sues his school because he can't read. Let's assume he's right; he can't read. Didn't someone know? Weren't some test data or related evidence concerning his progress collected at some time during those 12 or 13 years?

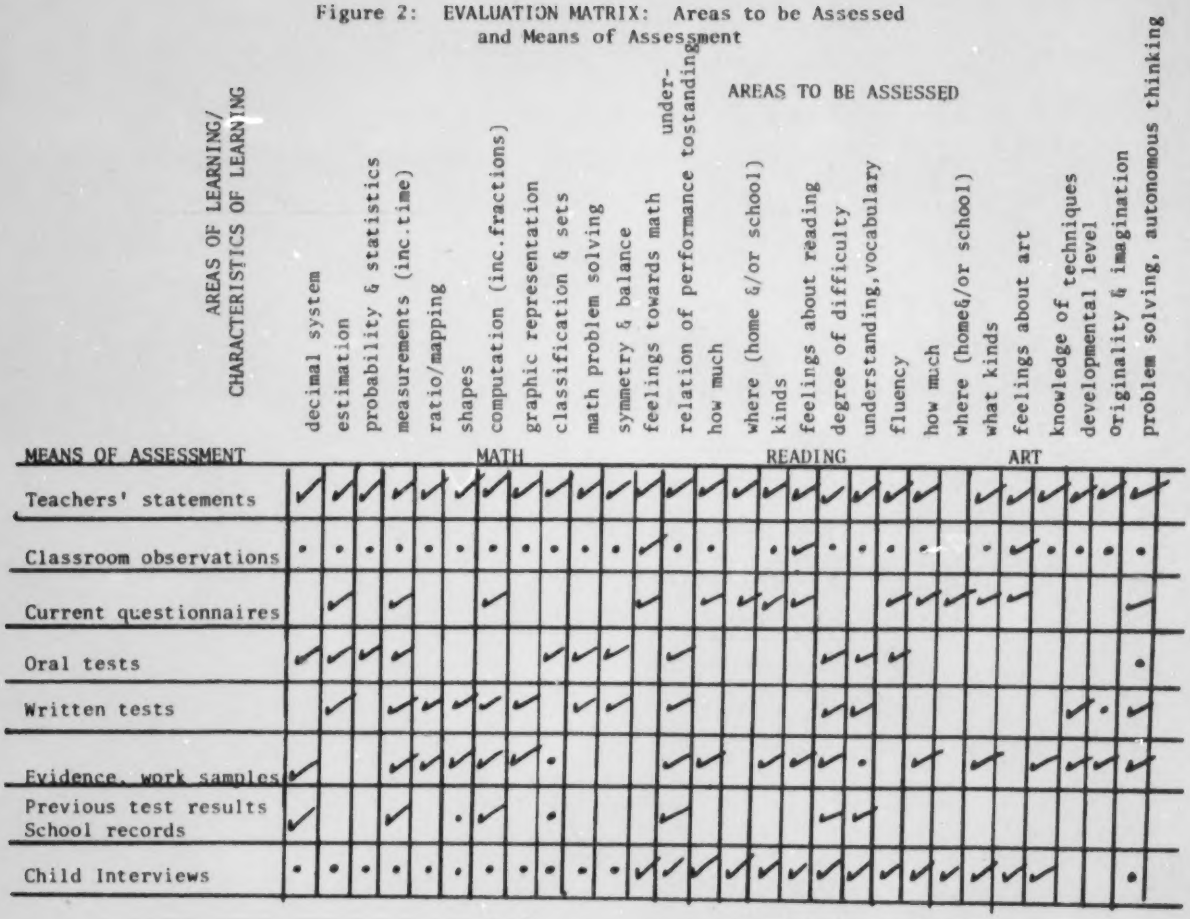
My fourth topic, you may recall, was an altervative to testing as a means of assessment. I want to present one such alternative in detail sufficient to illustrate the process. Examining it that closely, you will also be aware of the difficulties inherent in any thorough assessment. Data collection, whether by tests or other means, is merely one step in the assessment process. To provide a useful assessment - of a child's progress, of a new curricular method or of a teacher's competence - we must start with good questions. Actually, as most evaluation people in this audience will recognize, that good, clearly formulated question is the second step. To be able to ask a useful question, the goals or objectives of the activity to be assessed have to be known. I hop lightly over that important procedural step because I want to emphasize that merely substituting other procedures for a test does not an assessment make. Add another to our list of procedural defects - a failure to have any clear objectives to which test results may contribute - a failure more often blamed on tests than on test users.

In their discussion of diagnostic tests, that APA Committee on the Educational Uses of Tests with Disadvantaged Students makes the point emphatically:

> Another problem in the development of good diagnostic tests is that they should be part of a total diagnostic program and be prepared with this consideration in mind. The program should be dsigned to provide a trained specialist with the information he needs, and test results are only part of this information. (p.36)

The same assumption, that data collecting is merely one step in the process informs the specific example I want to discuss now. It's drawn from that "Special Feature on Testing" (from the March/April issue of TODAY'S EDUCATION) which I used as a reference earlier. "Testing: One Way It Can Be" (12) is a remarkably brief treatment of a thorough and very complex alternative to conventional testing. To evaluate the Cambridge (Massachusetts) Alternative Public School's impact on

Figure 2: EVALUATION MATRIX: Areas to be Assessed and Means of Assessment



NOTES

✓ indicates means chosen

• indicates possible means

from: Brenda S. Engel, "TESTING: One Way It Can Be," TODAY'S EDUCATION (Special feature on testing: How Should We Assess His Learning?) 66 (March-April) 1977, 50-52, p. 51.

learning, Professor Brenda Engel of nearby Lesley College helped the staff create an extensive evaluation of three curricular areas: math, reading and art. Along with what must have been infinite patience and consummate skills in group dynamics, Professor Engel's major contribution was a matrix, consisting of areas to be assessed, means of assessment and, for each of the three "subject fields," sub-categories

identified as "Areas of Learning or Characteristics of Learning." (See Figure 2, above.) The columns of the matrix indicate what was to be assessed and the rows show how each area could be assessed. Imagine the hours invested in teasing out, identifying and defining those individual elements, and the interminable committee meetings necessary to get any consensus on how to assess each specific sub-category!

In her article, Professor Engel acknowledges that the procedure involved "a substantial amount of work" but yielded many positive gains: data useful to assess skills, detailed and informative reports for parents and comprehensive pictures of each child's abilities and skills. She suggests an added side-effect: once through the initial matrix-building experience, a teacher could custom-build similar assessment matrices for subsequent assessments "as a more-than-adequate substitute for the usual reports and tests" (p.52).

Of course it's tedious - and rigorous - work to identify the right kinds of questions to ask if we want to assess a child's "developmental level in art or feelings about reading" but that chore is the substance of good assessment or diagnosis or evaluation. Professor Engel's article indicates that they, too, worked at answering the question we pose as central to any assessment practice: Who is looking for what?

Did she succeed? Well, that depends on how you define a successful outcome. Their final report "had to be designed for the requirements" of several widely different constituencies: the school department, school administration, teachers, parents and children. Let me use her words to describe the finished product:

> Our reporting system had three parts: a summary sheet for each child, a key (with school department expectations, not norms, underlined), and documentation (folders containing results of, or notes on, all the Means of Assessment). By glancing at only the summary sheet, one could gain a general impression of achievement; one could read the summary sheet in detail, using the key to identify specific skills; or one could scrutinize the actual evidence on which the summary sheet was based (p. 52).

Leonard Solo, principal of the Cambridge Alternative Public School believes it works; here's what he has to say about the results:

It is important to note that the "products" of Brenda Engel's assessment were a fairly thick folder on each of the 29 children and separate summary folders for the School Department and for me.

Parents were informed that their children's folders were in my office and they were invited in to read them. The best use was obtained, I think, when parents and I sat down together to carefully go over each page of a report for about an hour. About half-a-dozen were discussed this way. Some parents took the folders, duplicated them, and took them home to go over them slowly and carefully.

I read each of the reports and this helped me to both understand where each child was academically and to make some generalizations about broad curriculum issues: our children are fantastic readers; we probably do as well in Math as most schools, but we do not do as well in Math as we do in Reading; we have not solved the social/economic groups did not do as well as children from middle or upper groups. Because of this evaluation, we have re-doubled our efforts at improving our Math program and have formed a staff committee to examine the socio-economic issue.

Each of the teachers of the children who were assessed have read the folders - to get an idea of the abilities of the children and to better plan for their needs.

The School Department personnel who received the summarized reports - Directors of Art, Language Arts, Primary Education, Title 1 and the Assistant Superintendent received a copy of one of the student's folders as a sample - have not, as of this writing, responded to the evaluation.

Finally, our Parent-Staff Evaluation Committee is in the process of carefully examining the evaluation so that it can present a written report to the entire school.

(13)

In response to a question I posed, Professor Engel reports that this evaluation process grew out of staff discussions continuing over several years "about significant ways to evaluate children's progress." The matrix system is hers; in a recent note she indicates it is being adapted to assess school-cultural institution programs in Boston. Both she and the school principal, Mr. Solo, hope to continue these comprehensive assessments, evaluating children in three grades each year.

There can be little doubt that this specific venture has had a considerable payoff to many participants. Professor Engel's long association with the school, the rapport established, her expertise both in working with the staff and in guiding them to develop more and more concrete and detailed responses to the over-arching question "Evaluate what and for whom?" - all of these and the infusion of help from her graduate students may have been the necessary conditions to make the process "work." Merely to list in brief form the components (some eight different procedures) takes a full page; another page is required to describe the process by which data from the three areas are presented.

There seems compelling evidence to believe Professor Engel and her associates were successful in developing an alternative evaluation giving "as informative and as comprehensive a picture of each child's abilities and skills as possible" to a variety of interested parties. In those respects it has been a success; if it is continued we can be more confident that it may develop a more far-reaching impact. But one must raise the practical question: Will such laborious efforts be maintained year in and year out? Or will shortcuts slide in, using checklists from earlier matrices, for instance, instead of developing, step-by-step, new elements each year, ultimately shifting this alternative evaluation into one as routinized as the Friday ten-word spelling test? That's possible; in fact, it's a probable fate unless those responsible prevent it. Whether tests or classroom observations are the means for data collection, assessment is, finally, a process of human activity.

My fifth and final topic is intelligence testing. In a colloquium of this sort, some discussion of IQ testing is almost obligatory, but since so much has already been said and written, I approach the topic with some misgivings. Much of my commentary will be autobiographical but let me begin with a fable borrowed from an essay, "The Meritocracy Scare" by Karl W. Deutsch and Thomas Edsall in an early fall 1972 issue of SOCIETY.[14] That fable was the lead of their rebuttal to Robert Hernnstein's "IQ"[15] which had come out in the September 1971 issue of THE ATLANTIC MONTHLY:

> "Thanks be to Ammon," said the Senior Temple Priest to the young novice, "that our hieroglyphic writing is so difficult that only a few men are intelligent enough to learn to read and write. And thanks be to Ammon that we have learned to measure the average number of hieroglyphics learned by the young scholars in our temple schools. We can now compare the number of hieroglyphs by which a boy exceeds or fails short of the average number of hieroglyphs mastered by his age group. Thus the Archpriest in charge of Temple Studies can compute the hieroglyphic quotient - which the Phoenician traders call H.Q. for short - for every boy in our school; and from this H.Q. we can foretell a boy's chances for a career in the priesthood: whether he will become a member of the priestly caste, commanding the secret arts of reading and writing, or whether he will be cast out from here and put among the menials to drag stones to the site of the next pyramid.
>
> "But is it not true, oh venerable one," said the novice, "that the children of the temple priests are encouraged from infancy to pay attention to hieroglyphs? They see them on their toys and in their nurseries, and their fathers and mothers praise them for anything they learn. Besides, their fathers and mothers feed them fish which stimulates their mental powers."
>
> "My son," thundered the Senior Priest, "you have listened to the evil counsels of the levelers and pyramid destroyers who rave about making all men equal. Some are driven by sentimentality or

by envy of their betters, but they all disregard the hard evidence of science. If all boys lived in the same homes, had the same food and toys and got the same encouragement, the smartest boys would still learn hieroglyphs faster and become priests, and the slower learners would again have to dig ditches and drag stones. Moreover, the smart boys would beget smart boys who would again win in the examinations and the dull boys again would have dull children who would fail." (p. 71)

Drs. Deutsch and Edsall conclude their fable by observing that "the prototypes of our imaginary temple priest and his novice are preserved only as mummies in museums - but their social philosophy still marches on."

I, too, find the psychological and developmental principles underlying intelligence tests both personally abhorrent and theoretically invalid, or at least simplistic. It may be true that Terman, Goddard and Yerkes were racists; as a citizen I deplore that but what truly distrubs me is that any serious student of human behavior or, indeed, anyone seriously experienced in life would accept, unchallenged their empty, pseudo-profound pontifications. But, quite frankly, I don't believe many people really did read or attend to those explanatory discourses. In his book, THE SCIENCE AND POLITICS OF IQ (16) Leon Kamin's excerpts from the writings of Terman, for instance, are chilling but even more helpful is Professor Kamin's thoroughness in portraying a social and scientific context which did little to inhibit the promotion of simplistic eugenic rubbish. There we have a genuine grievance; the blind faith we have in science and its presumably "value-free" orientation has provided a haven still utilized by psychologists who continue to write and do research - much, in my judgment, of inconsequential triviality - distorted by the unnatural context of their laboratory yet glibly generalized to broader populations than college sophomores or a supportive of fundamental laws or theories.

As Kamin points out, comparable findings and pronouncements by those American psychologists of the first three decades of this century "fixed on succeeding generations of psychometricians, equipped with more sophisticated scientific tools, a clear disposition toward a genetic interpretation of IQ data." And, as Dr. Kamin also notes, "that predisposition is still with us."

Yes; it is - largely unrecognized and unexamined. I recall administering scores - maybe hundreds - of Stanford-Binet tests when I was an intern at Johns Hopkins Hospital in the late 40s; there, at the finest medical institution in the world, in the center of the East Baltimore Health District which in turn was in the center of the Baltimore slums - an essentially black, low-income neighborhood - I don't remember seeing a single non-white patient during my time on the psychiatric service. Maybe one or two; I certainly don't remember any and I know my recollection is correct that that absence was never discussed, even though families from the neighborhood of the hospital made up the bulk of patients on the other hospital services. Despite this now-glaring hiatus, I do recall arguments and discussions about intelligence and the meanings as well as utility of "IQ" and "Mental Age." Not, I'm sure, very profound but deliberately pragmatic, all of us were necessarily preoccupied with concrete implications and direct applications of the data: "What treatment implication from this history, these scores, that laboratory data, etc.?" I recall, envious then of his assurance, how emphatically and totally, a psychiatric resident dismissed any suggestion that IQ scores were fixed or that a Mental Age of 14, or 16 or any age represented the upper limit of intellectual development.

Such a conclusion simply went against all of his experience and he rejected it. In fact, none of us were well-informed or even aware of the basic writings in the fields of psychometrics and/or testing philosophy. Nor did we feel at all constrained or restricted by that ignorance. But, even as we were free - by virtue of ignorance - of the prejudicial, blatantly biased scientific writings which purportedly

validated the instrument we used, that "freedom" in the long run has cost us, our patients and society dearly. The cost to psychology has been a serious, maybe even a fatal, erosion of respect and regard among colleagues and consumers. Over and above actual loss in social productivity as attributable dollar costs, the greatest loss to society is in an erosion of confidence, of trust in professionals' judgment and integrity. Perhaps it has contributed also to the fostering of a rampant anti-intellectual know-nothingism, replete with a dismissal of "science" as fradulent, that characterizes a large number of our educated population (see Reference Note 5).

Bear with me as I play "If-I-knew-then-what-I-know-now." I want to identify two specific errors on our part back then. The first was a grievous gap in knowledge, for the remedy of which I'm grateful to Dr. Kamin. He identifies, in Carl Brigham's classic A STUDY OF AMERICAN INTELLIGENCE (1923) [17] the "research" which re-analyzed World War 1 army data on immigrant intelligence. "The performance of Negro draftees was taken as a kind of bedrock baseline; fully 46 percent of the Poles, 42.3 of the Italians, and 39 percent of the Russians scored at or below the Negro average." Kamin continues:

> "The most original analysis, however, centered about the 'very remarkable fact' that the measured intelligence of immigrants was related to the number of years that they had lived in America... This analysis indicated that foreigners who had lived in the country twenty years or more before being tested were every bit as intelligent as native-born. Those who lived in this country less than five years were essentially feeble-minded."

As Kamin points out, some might interpret this set of findings as suggesting the IQ test scores were heavily influenced by exposure, by acculturation. However, Brigham - in a vivid illustration of how easily all of us fall into believing what we wish to believe - read those data differently. Kamin quotes from Brigham's writing: "We

must assume that we are measuring native or inborn itelligence...." He and others "knew" (i.e., "believed") that the Army Beta was designed to measure the genetically determined intelligence of the illiterate and the foreign-speaking. Consequently, (again quoting Brigham via Kamin): "The pypothesis of growth of intelligence with increasing length of residence may be identified with the hypothesis of an error in the method of measuring intelligence...." Since no one who saw the data could ignore the fact that time in this country affected test performance - the longer here at the point of testing, the higher the score - Brigham explained this away by an alternative "hypothesis": "....the curve indicates a gradual deterioration in the class of immigrants examined in the army who came to this country in each succeeding five-year period since 1902." In other words, the clientele of this place are getting worse!

Penetrating these thickets of language is difficult even in reading; the thread must be even more difficult to follow by ear alone. But part of my point is to demonstrate the hard work, the boring and confusing task each of us faces in unlocking and exposing psychometric mythology; identifying and discriminating between fact and fallacy is a chore. Yet, in my mind these responsibilities - understanding the premises, ordering the data, making testable assumptions from the scores - are required of us as professionals. To minimize testing damage, we need a vigorously prosecuted war on ignorance not a suppression of testing.

What was Brigham saying? That's simple; he even called it "the race hypothesis"; as the proportion of Nordic blood decreased, the intelligence of the immigrants decreased. There's much, much more; regardless of your position vis-a-vis IQ testing, reading Kamin's THE SCIENCE AND POLITICS OF IQ will leave you not only better informed about psychometric history but also more aware about the implications of those tools we use. Let me conclude this first example of the danger of ignorance with one final excerpt from Brigham's....STUDY OF AMERICAN INTELLIGENCE. In it he urges his readers to abandon "feeble hypotheses

that would make differences (within ethnic groups over time in this country) an artifact of the method of examining." He asserts flatly that "our test results indicate a genuine intellectual superiority of the Nordic group...." Right on, Brigham! Thanks for giving us scientific evidence to validate what we already knew, to make our bigotry legitimate.

In 1949 I should have, but I didn't know any of that. That ignorance informed - more precisely mis-informed - my bland acceptance of IQ scores as useful, though I have to defend myself by saying I never accepted test scores as sacred. But, you see, all of us - busy, dedicated practitioners - were merely concerned with finding a useful tool to help us in our chosen task of helping others. Not for us the exquisite, tedious debates or seminar discourses over sources and meanings. Give us the tool, we said; carry on your pedantic discussions while we work. Which attitude set us up for the second error.

How many of you recall the item "Aesthetic Comparisons" from the old ('36) Stanford-Binet, incidentally carried over unchanged from the 1917 test? It comes at Year IV-6; the directions are admirably simple and straightforward, well-suited to the 4 1/2-year-old: Showing the appropriate card to the child, the examiner merely says:

"Which one is prettier?"

There are three cards, each with two heads portrayed. Scoring is a matter of correctly identifying which head is prettier; it is, indeed, a simple item which appears to discriminate sharply between subjects of different levels of intelligence. (See Figure 3, following page.) Figure 3 presents two of the three cards; isn't it perfectly clear that any bright 4 1/2-year-old can make the correct choice? Or, is the world, not to mention the concept of intelligence, really that simple? 'Way back then- over a quarter of a century ago - I must have thought so. If anyone objected to such exercises as a means of assaying intellectual functioning, I never heard them.

I am not appearing here as an apologist; my ignorance then bordered

Figure 3: "Aesthetic Comparisons," Age IV-6 item, Stanford-Binet intelligence Scale

from: Lewis M. Terman & Maud A. Merrill, STANFORD-BINET INTELLIGENCE SCALE (Manual for the Third Revision, Form L-M), Boston: Houghton-Mifflin, 1960; p. 79.

on professional malpractice. That it was widely shared does not excuse it. Ignorance, dammit, is no excuse. And when we deal with data as pervasive in their influence as test scores, we can't afford the luxury of good intention. IQ testing most sharply illuminates this danger. While the "Aesthetic Comparison" item has disappeared, the same simplistic, additive scoring mechanics continued. That we can live with, if we can transcend the underlying errors in assumptions and if we overcome our ignorance. Here's Leon Kamin on this point: (18)

> To attribute racial differences to genetic factors, granted the overwhelming cultural-environmental differences between races, is to compound folly with malice. That compounding characterized the mental testers of World War 1, and it has not vanished... The IQ test in America, and the way we think about it, has been fostered by men committed to a particular social view. That view includes the belief that those on the bottom are genetically inferior victims of their own immutable defects. The consequence has been that the IQ test has served as an instrument of oppression against the poor - dressed in the trappings of science, rather than politics. (p. 22)

To put this succinctly into a broader social context, intelligence tests and IQ scores are, repeatedly, misused in that manner widely identified as "blaming the victim." It's a circumstance not unlike that Lester Maddox posed for us when he concluded that any steps taken to improve the Georgia jails would be futile until they began taking in a better grade of prisoners!

Does all of this force me to conclude that IQ testing should be foresworn? No. I'm acutely aware that IQ tests assay materials which are learnable. In fact, I rejoice in that, for comprehending and accepting that points us in the direction we should go. I know the choice is not as simple as the following illustration implies but I use it to illuminate my point sharply. Assume with me for a moment you are a school psychologist or a counselor new to a school district.

One of your first responsibilities is to help the school adapt its curriculum to fit better the educational levels and needs of the pupils coming from a conventional kindergarten into a primary grade unit. Let's also assume that for this year at least - until you've had time to educate the staff about assessment procedures - you and the school are committed to a standardized test. Let's also accept that this is a ghetto school, with a non-white enrollment.

For that evaluation, the large scale assay to help you and the teachers begin to get some handle on the clientele you serve, which of these tests would you recommend: the California Test of Mental Maturity, the BITCH scale (Robert L. Williams' Black Intelligence Scale of Cultural Homogeneity) or its derivative SON OF A BITCH, the Kulhmann-Anderson or Dove's Counter-Balance intelligence Test?

I know what my choice would be: the CTMM. And it would still be my choice even if I couldn't prevent the test results from coming back as "Total Mental Factors" IQ scores, because I'd have at least an educationally-useful ranking or distribution which I could translate into specifics, helping put some order and clarity into the amorphous mass of undifferentiated but precious potential those kindergarten children represent.

No, I don't believe the scores, per se, tell me anything useful. If I choose to believe a CTMM Pre-primary Level test score of 140 really means that Sally is a genius, that's an error of ignorance on my part. Of course, that's a better error to make than assuming our instructional efforts will be futile for Shirley whose CTMM "IQ" is 67, but both misinterpretations - encouraged to some extent, it is true, by the material supplied by the publisher - are mis-uses of the data. What I would use are the summary, group data which define, however crudely, the parameters of that mass. Those results can be organized in a manner which teachers will find useful; they can help us in making helpful decisions about the children for whom we are responsible.

Further, I am sure that data from a reliable, well-standardized test such as the CTMM, despite all of the claptrap about its language and non-language factors or the spurious "diagnostic" value of the sub-tests, are more useful than the esoteric "results" from a pool of such questions as "When does the eagle fly?" even if that information is already in the cognitive domain of those pupils from their life experience outside of school. Keep in mind that our purpose here is to make better educational decisions, not to establish a meaningless but appealing hierarchy of IQ scores. In short, I want my test results to tell me something that has utility, not to re-new the wrong-headed ideological argument about which race or ethnic group is brighter.

So, even though the Williams tests and the Dove scale have helped by focusing on the biased fallacies in baseline content of our so-called intelligence tests, illuminating clearly their cultural bias, I can find no evidence that either would serve the conrete task I've posed here. Why not the Kuhlmann-Anderson? While the opinion is arguable, my comparison suggests that the CTMM has better norms - that is, its norm group is more representative - and that its content is more directly related to what schooling purports to deal with.

Finally, you see, that's what educational tests are for: to help us make school learning more successful.

Notes and References

1. Jensen, Arthur T., How much can we boost IQ and scholastic achievement? HARVARD EDUCATIONAL REVIEW, 1969, 39, 1-123.

2. Among professionals as well as for many socially-concerned persons, the issues subsumed under the label, "Jensenism" are now familiar, almost cliched topics. Lee Cronbach's essay in a recent issue of the AMERICAN PSYCHOLOGIST brings together many related aspects and places them in a perspective both political and professional. (Cronbach, Lee J., Five decades of public controversy over mental testing. AMERICAN PSYCHOLOGIST, 1975, 30, 1-14). Prepared as an American Academy of Arts & Sciences study on "Social Science Controversies and Public Policy Decisions," Cronbach weighs and clarifies a host of background issues, from the 1917 Army Alpha through "the most dramatic fulminations....set off by Arthur Jensen's article" and its "peculiar echo" (Herrnstein's ATLANTIC MONTHLY essay. See Note #15). Presenting some possible generalizations, Dr. Cronbach observes that "there is a tide in the affairs of issues"; that perspective, crucial to any reasoned comprehension of the "testing controversy," is magnificantly illustrated in this piece. Further, his references offer an extensive reading list for anyone wishing to review the related literature.

   Since the focus of Professor Cronbach's essay is on the policy controversy, it does not deal, in depth, with one substantive issue - heritability. For non-geneticists, Jerry Hirsch's invited address to the XIXth International Congress of Psychology, London, 1969, is a helpful, albeit somewhat technical explication. It is reprinted in the Fall 1969 issue of the IRCD BULLETIN which, in turn, also discusses the broader social implications of Dr. Jensen's HER article: IRCD BULLETIN, Fall 1969, V (4): ERIC Information Retrieval Center on the Disadvantaged (Teachers College, Columbia University, 525 W. 120th Street, New York, N.Y. 10027); Hirsch, Jerry, Behavior-genetic analysis and its biosocial consequences. IRCD BULLETIN, 1969 (Fall) V (4), 3-4, 16-20.

3. See, for example, Jensen, Arthur R., Social class, race and genetics. AMERICAN EDUCATIONAL RESEARCH JOURNAL, 1968, 5, 1-42; and, Jensen, Arthur R., Social class and perceptual learning. MENTAL HYGIENE, 1966, 50, 226-239.

4. Lee J. Cronbach, ESSENTIALS OF PSYCHOLOGICAL TESTING (3rd edition). New York: Harper & Row, 1970. In Chapter 2, "Purposes and Types of Tests," Cronbach presents the two-fold classification system (pp. 35-41) briefly discussed in this paper. As noted, "tests of ability," from among those which measure maximum performance, is, itself a very broad category, encompassing more than one might conclude from the label, "ability." Thereunder Cronbach includes not only "intelligence tests" (he prefers "measures of general mental ability" since he is acutely aware that "intelligence" has too many meanings to be precise) but also measures of special ability, proficiency tests and, finally, achievement tests (in his terminology, tests which assess "mastery of a school subject" (p. 38)). Note the range of types which fall in the category of assessing maximum performance. All share, in Cronbach's terms, a "distinguishing feature....The subject is encouraged to earn the best score he can" (p. 35).

5. The crucial short-fall of this scientific and professional "know-nothing-ness" is beautifully captured in John Leonard's aphorism: "None of us can afford the sort of mindless whine that says it's so difficult to make sense out of things that the fault must reside in the very idea of trying to make sense out of things." (John Leonard, The Last Word: Should Science Be Shot? THE NEW YORK TIMES BOOK REVIEW, 18 July 71, p. 31.)

6. As a single, but by no means complete, resource, the January 1975 issue of the AMERICAN PSYCHOLOGIST provides ample commentary and citations for the reader wishing to pursue, in depth, the psychological literature on the topic of misuse and unsuitability. Beginning on page 15 of that issue, the report of the Humphrey's committee (Educational Uses of Tests with Disadvantaged Students") is presented in

full; vigorous dissent from the committee report, by Drs. Jackson (pp. 88-93) and Bernal (pp. 93-99), along with a "rebuttal" to those criticisms by Dr. Humphreys (pp. 95-96 appears in the "Comment" section. Since both the content and the references (a total of almost sixty sources) listed might be of great interest, each of those contributions is herein listed with complete bibliographic citation:

Bernal, Ernest M., Jr., "A Response to 'Educational Uses of Tests with Dis-advantaged Subjects' (sic), AMERICAN PSYCHOLOGIST, 1975, 30 (1), 93-95;

Cleary, T. Anne, Lloyd G. Humphreys, S. A. Kendrick and Alexander Wesman, "Educational Use of Tests with Disadvantaged Students" (a report prepared by a committee at the request of the Board of Scientific Affairs, American Psychological Association, Lloyd G. Humphreys, committee chair). AMERICAN PSYCHOLOGIST, 1975, 30 (1), 15-41;

Jackson, George D., "On the Report of the Ad hoc Committee on Educational Uses of Tests with Disadvantaged Students: Another Psychological View from the Association of Black Psychologists," AMERICAN PSYCHOLOGIST, 1975, 30 (1), 88-93.

A personal opinion evolves from my re-reading of those documents. In toto, they offer nearly sixty citations; eliminating the cross-referencing of each article by the next, over fifty separate sources are listed. Only two (Brigham and Mercer) are cited in common by the Committee and by the respondents critical of the committee report! The separate worlds we inhabit may be more isolated, one from the other, than we choose to acknowledge. Since I make reference to Brigham's work later, I'll provide that reference then; the Mercer reference jointly cited is to her research on the diagnosis (and mis-diagnosis)of mental retardation among minority populations (Mercer, J.P., LABELING THE MENTALLY RETARDED. Berkeley: University of California Press, 1973).

7. American Psychological Association, STANDARDS FOR EDUCATIONAL & PSYCHOLOGICAL TESTS (rev. ed.). Washington, D.C.: American Psychological Association, 1974.

8. McKenna, Bernard, Edwin F. Taylor, Charlotte Darehshori, Brenda S. Engel and Frances Quinto, "Special Feature on Testing." TODAY'S EDUCATION, 1977 (March-April), 66 (2), 35-55.

This "special feature" consists of six separate articles, including an anonymous "summary of alternatives," based on a report to the NEA Representative Assembly by "the NEA Task Force on Testing." Further on in this paper, Brenda Engel's work is discussed in some detail; in the immediate context of this initial citation, a statement is drawn from the lead essay ("What's Wrong with Standardized Testing?",pp. 35-38) by Bernard McKenna, of the NEA staff. Subsequently, I also quite at length from the concluding piece ("A Summary of Alternatives," pp. 54-55).

The "tilt" of the whole collection is well-illustrated by the opening lines of Dr. McKenna's introduction: "In the social sciences, economics is known as the dismal science. In education the "dismal science" has to be standardized testing" (p. 35). Between those sentences and a reprinting of a 1976 NEA Representative Assembly resolution on testing ("76-65. The National Education Association strongly encourages the elimination of group standardized intelligence, aptitude and achievement"), three articles in addition to those by Drs. McKenna and Engel, round out this feature. Although there is no pretense in the assembled articles of a balanced discussion, pro and con, about testing, the several articles provide a reader with both a deeper understanding of the NEA's current strong and outspoken anti-group testing position and some fascinating details and interpretations of the testing scene. As a resource, then, those other three essays are cited (and briefly annotated) here:

Taylor, Edwin F., "The Looking-Glass World of Testing," TODAY's Education, 1977 (March-April), 66 (2), 39-44. The Alice-in-Wonderland image is skillfully supported by the misleading but at times telling analysis of individual test items. Ignoring any possible psychometric merit in a test item beyond its substantive content, Dr. Taylor is devastating - as well as insightful - in his dissection of standardized tests.

Darehshori, Charlotte, "The Way It Is." TODAY'S EDUCATION, 1977 (March-April), 66 (2), 46-48. This excerpt says it all: "it seems, then, that little of value is derived from these tests, other than using the scores as criteria for deciding which schools will get federal money for new programs...." (p. 48). Ms. Darehshori was, I expect, asked to contribute some "from-the-firing-line" substance to this feature, to avoid the error of a dull, stuffy discussion of real issues. Hardly an eye is dry reading her poignant anecdotes of distress, rampant anxiety and imminent collapse in the fact of tests. It's only upon reflection that one realizes that these speculations are self-serving, unsubstantiated conjectures.

Quinto, Frances, "Teacher-Made Tests - an alternative to standardized tests." TODAY'S EDUCATION, 1977 (March-April), 66 (2), 52-53. A bit over a full page of excellent advice and practical tips about constructing tests for classroom use. If educators were only as skilled and sensitive regarding testing principles and practices as the writer, there would be no flap over the mis-use of tests.

N.B.: Reprints (single copies) of the nineteen page feature are available free by sending a stamped (24¢), self-addressed legal size envelope to: NEA-IPD, 1201 16th St., N.W., Washington, D.C. 20036

9. "Spring Survey of Education," THE NEW YORK TIMES, Section 12, Sunday, 1 May 77, pp. 28.

10. Re: "Misleading Data" and authorship. That anonymity may be an artifact of layout problems. The piece itself is on page 19; the accompanying figure illustrating the nature of grade equivalents fails in columns five and six of the immediately preceding page (p. 18) in the context of a signed piece, "What the Test Scores Do and Don't Say About a Child," written by Robert Reinhold, a reporter of THE TIMES's Washington Bureau. Both articles are so equally clear and informative that I'm willing to credit each to Mr. Reinhold. Certainly anyone responsible for translating test scores to a lay public would be well served by mastering both articles.

11. "Reading Flunkers Not Advanced," THE DAILY PRESS (Utica, N.Y.), 2 June 77. The article indicates that it is the "Reading Comprehension" (not "Vocabulary") section of the ITBS which is being utilized as the criterion.

12. Engel, Brenda S., "Testing: One way it can be, "TODAY'S EDUCATION, 1977 (March-April) 66 (2), pp. 50-52.

13. Personal Communication from Professor Brenda S. Engel (Lesley College Graduate School), 24 May 77. Mr. Solo's comments were provided in an Addendum to a large package of materials providing more details on the evaluation process. These supplements, carrying forward at greater length the specific procedures and illustrations of the materials used in preparing various reports and summary sheets, were generously provided by Dr. Engel.

    In that same communication, she also noted that a fuller version of their assessment procedures are forthcoming in a monograph to be published by the University of North Dakota Press, as one of a series by the North Dakota Study Group on Evaluation.

14. Deutsch, Karl W. and Thomas Edsall, "The meritocracy scare, "SOCIETY, 1972 (Sep/Oct) 9 (10), pp. 71-79.

15. Herrnstein, Richard I., "IQ", THE ATLANTIC MONTHLY, 1971 (Sep), CCXXV111 (3), pp. 43-64. For those interested in an extended explication of Professor Herrnstein's views, his subsequent book-length publication on the same topic, IQ IN THE MERITOCRACY (Boston: Little, Brown & Co., 1973) carries his thesis forward. Brody and Brody capture the essence of his argument: "Herrnstein (1973) has suggested that the relationship between intelligence test scores and occupational status are rational and necessary in any advanced technological society." (p. 98, Erness B. Brody and Nathan Brody, INTELLIGENCE: Nature, Determinants and Consequences. New York: Academic Press, 1976). In that same context ("Intelligence and Success at an Occupation," pp. 98-105) Brody and Brody review relevant studies on this topic, concluding, alas, that the research data are sorely deficient: "(The literature does

not directly provide guidance on some of the critical questions about social policy...." (p. 104).

16. Kamin, Leon, THE SCIENCE AND POLITICS OF IQ. Potomac, Maryland: Lawrence Erlbaum Associates, 1974 (distributed by Halsted Press, John Wiley & Sons).

The March-April 1975 issue of THE NATIONAL ELEMENTARY PRINCIPAL printed an eight-page (pp. 15-22) "adaptation" of Dr. Kamin's book which presents - quite accurately, I believe - both the sense and considerable substance of the work. I relied on that article rather than the book for most of the quotations and excerpts from Dr. Kamin's work. Since he is a professed "environmentalist," a reader wishing to find a more evenly balanced perspective, as well as a rigorous and incisive critique of Dr. Kamin's criticism of Cyril Burt's twin studies would be well-rewarded by a careful perusal of the discussion in Brody & Brody (In Chapter 5, "Determinants of Scores on Tests of Intelligence," pp. 111-165; see, especially, pp. 115-138).

17. Brigham, Carl C., A STUDY OF AMERICAN INTELLIGENCE. Princeton, N.J.: Princeton University Press, 1923.

The extended excerpt immediately following this reference is Dr. Kamin's paraphrase of Brigham's findings (Source: The National Elementary Principal, p. 20). In the next paragraph, Kamin is quoting Brigham (Brigham, p. 100).

The final quotation from Dr. Kamin's writing (p. 23) is also taken from his essay in the March-April 1975 issue of THE NATIONAL ELEMENTARY PRINCIPAL.

NON-VERBAL COMMUNICATION AMONG PUERTORICANS

Dr. Carmen Judith Nine-Curt

University of Puerto Rico 1971

It is indeed a pleasure to be here with you. However, I am in a state of culture shock because of the temperature. It was 91 when I left San Juan yesterday, and the cold weather has thrown my cultural synchrony out of gear. I'm not only freezing: I'm homesick!

That was a cultural introduction. Now, my talk. Since I am an English teacher and I cannot get away from testing and quizzing my students, I am going to give you a short quiz first of all. I am sure, however, very few of you have ever taken this kind of quiz. It is a quiz on gestures. Let's see how many barely make it. Gestures are studied in the first field in non-verbal communication I will be talking to you about today: KINESICS. This is the field where Ray. L. Birdwhistell, (1) the famous anthropologist from the University of Pennsylvania, has distinguished himself for his findings. This man has done for Kinesics what the linguists did for language studies and recording long ago. However, his system is still very cumbersome. As of this moment, the most we can do is simply live with the extreme variety of movements and twitchings and changes of facial expressions man makes, hoping that someday someone will do for us what Sapir did for language description in the twenties, namely, develop a simple way for describing movement in man. And now, the quiz.

Please take out a piece of paper and write down the first word that comes to your mind for the gestures I make. The gestures fit nicely with the Spanish language. They usually substitute words there, or accompany them, or fill in a slot as if they were words in an utterance. I will say the statements that accompany the gestures in both English and Spanish, so everybody understands the context where they usually appear. These gestures are quite prevalent in the Caribbean area, and possibly in coastal Latin-American, as well as in southern Europe, around the Mediterranean, where the people who settled the Islands came from. Ready?

(The speaker now proceeded to give a visual test on Puerto Rican gestures (2) which is available on video-tape)

Please correct your own quiz now. 1. "Crowded, many, a lot of". 2. "Stingy". 3. "Angry, furious". 4. "Pointing with lips". 5. "Delicious, excellent, terrific". 6. "Tiny". 7. "Skinny, very thin". 8. "Asking a question" or "Please repeat", by wiggling nose. 9. "It's finished, gone". 10. "Quarreling".

How many had a perfect score? How many had fewer than five correct? Please do not feel uncomfortable for failing the quiz. People from cultures other than Puerto Rican usually get thirty percent or less correct.

How did I become involved with nonverbal communication? It started about fifteen years ago, around 1962. I had just finished my doctoral course work at Teachers College, Columbia University, and had returned to Puerto Rico to my English teaching at the State University in Rio Piedras. One day in the second week of school I asked my students to do something. I did it in English and I spoke very fast. Suddenly I saw about ten noses go like this: (wiggle of nose). The strange thing is that I noticed the wiggling and was startled by it. I would not have been startled if I had not left the Island to study abroad and been away for three years. I immediately reacted in the appropriate Puerto Rican way by repeating in Spanish what I had said in English. Their wiggling noses had asked me to repeat, for they had not understood. I remember I thought then something like this: "What was that? There were no sounds in that wiggling of noses, no grammar, no intonation line. However, there was communication. They asked me a question and I reacted and answered it. What was that?" I had initiated myself in the field of Kinesics, about which I knew nothing, not even its name at that time. I then started to collect Puerto Rican gestures, and today you have had a sample from my collection of about a hundred and fifty. And it is growing.

Collecting gestures was fun, but I had all kinds of worries in my mind while I did it and talked about them to my colleagues at home and here in the States. Do they function in both cultures? Can people in the States understand them? If they don't, and we Puerto Ricans use them

out-of-awareness all the time to accompany or substitute speech, what does it do to our communication process? Because of my linguistic training and my preference for phonetics, I knew that if a sound is not present in your vernacular, you cannot hear it when it is said to you in the foreign tongue. It took me almost a year to hear and say the differences between seek and sick. What if the same thing happened with these cute gestures I was collecting? If a Puerto Rican wiggled his nose at an American, asking him to repeat what he had just said, and the American missed the wiggling and its meaning, wouldn't communication between the two persons suffer? If the answer was YES, then all the toil involved in teaching awareness of new sounds had to be transferred to the teaching of those non-verbal elements that did not function in the native culture. I actually panicked, for the teaching and learning of English as a second language is quite a difficult task for everyone involved. And now, things were becoming even more complicated! You see, after puberty one cannot hear, or do, or see anything that does not function in one's culture or one's vernacular, unless one is very carefully taught to hear, do, or see something different. Not only that, but according to Birdwhistell, what is acceptable, beautiful, refined, good manners in one culture, may be considered rude, strange, bullish, or pathological, insane in another. (3) Life was indeed getting complex for this aging teacher. But I never thought such complexity could bring such excitement, such joy and such freedom.

Although my American English is pretty good, my non-verbal ways are Puerto Rican. I did not remember having ever been taught to use the right American non-verbal systems of communicating with their language accompaniments. And of course, I had never taught them to my students, for I did not know about their existence, even. However, I have come to a full realization and conviction that they have to be taught in any language learning situations to Puerto Ricans and Americans if they are

going to communicate effectively in an American or a Hispanic setting. Learning this does not mean one sheds one's cultural identity, for after seven years of age, you cannot change identity. You simply consciously change, switch cultural channels, so to speak, to fit the new cultural situations. To me this skill is an indispensable tool in this world of ours where the many and the different have to live together, hopefully, in peace and dignity and understanding. The alternative to not learning conscious switching of cultural channels is to continue stepping on other peoples' cultural toes unwittingly, and suffering for it.

In actual cross-cultural interrelationships, adequate non-verbal behavior does the trick of bringing about positive and effective communication, more so than language. Birdwhistell believes that in everyday normal communication between people of the same culture, 35% is language and 65% non-verbal. (4) As a language teacher, I have taken contrastive studies in Spanish and English phonetics, in linguistics, in contrastive grammar. Actually, I have been studying only a third of what human beings use to communicate with each other, and this within the same culture! Imagine then what communication is like cross-culturally! A mystery still. Phonetics is enough of a specialization to have one devote one's whole life to it and to teaching it. Now, other areas appear. Let me mention some of them to you: KINESICS which studies movement; PROXEMICS which studies space; HAPTICS which deals with touching; POLYCHRONISM and MONOCHRONISM which deal with the way people order activities in time; OCCULISICS which studies the way we handle our eyes; ATTIRE which deals with what we do with our clothes and the messages they send; SILENCE and NOISE which are also of great importance in communication; and others.

Birdwhistell's statement regarding behavior and how sane ones in one culture may be considered insane in another, started me thinking about my own behavior as a Puerto Rican, as I moved in American streets, into shops here and there, and at different Universities. The years

1974 and 1975 were very productive years for me: I had been granted a sabbatical which I spent here in the States and I devoted the year entirely to studying non-verbal communication. I began to notice things as I moved about in Philadelphia and in New York City. I suddenly realized that people were staring at me and looking at me rather strangely. Then I realized I was smiling at women as they approached me. In my region in Puerto Rico, in my hometown of Mayaguez, women smile and bow their heads at each other in passing. You do not have to know the person to smile. It is a greeting. However, you do not smile at a man because the message is quite different. American girls go home and they see all this smiling going on, and they start simling at men which gets them into all kinds of trouble. I was doing all that smiling in Philadelphia when I caught myself. One other day, I entered a printing shop to order some namecards. I approached the counter and the clerk standing behind it. If I had approached her with no smile on my face, it would have been perfectly allright. But I approached the counter like this, smiling away. To her "May I help you?", I answered in my good American English, "I would like to order some name cards." But I was smiling from ear to ear. I suddenly saw the girl panic. We went through the whole ordering routine. She actually took down the order wrong. I am sure she felt she was taking care of a slightly insane client. I later on realized English has phrases such as these: "He was smiling away like a stupid old fool." "She was grinning like an idiot." No wonder so many Puerto Ricans are being placed in special education classes here in the States!

It is widely believed that smiles express more or less the same feelings the world over. They do not, really. There may be overlappings in meaning, but some of the meanings are completely different from culture to culture. Take this example from home: a student of mine failed a test and came to see me about a make-up. I am an authority figure, actually a mother authority figure--you know what motherhood is like at home! She sat next to my desk. I asked, "What happened, Luisa?" She started to smile very broadly. I repeated, "What happened on the test, sweet?" Her smile got larger and became frozen. I knew she was

going to start crying any minute. And she did. She was in pain and quite desperate.

The other day I interviewed another girl who wanted to enter the TESOL program. She giggled all the time we talked. I looked at her and at her behavior with American eyes, and said to myself: "Over there, she would have been put away immediately. Out-right crazy!" I knew different. "Do you really want to be an English teacher?" She answered me in very good English, "Do you think I can be an English teacher?" I did not answer her directly, but asked "Why are you so nervous?" She said, "I have had loads of trouble at home," and started to look immensely sad. Her smiling and giggling mask was covering up immense pain.

I also remember the shock I received when I got this very nicely done study at New York University Medical Hospital by several psychiatrists there. (5) They found out that when mentally ill Puerto Ricans were evaluated by an American psychiatrist, the patients were more (?) schizophrenic (6) than when they were evaluated by a doctor from Columbia, South America. Actually, Colombian culture is quite different in many ways from Caribbean cultures. I am sure if a Caribbean doctor, or better still, a Puerto Rican doctor had evaluated these patients they would have been sent home as normally insane, like all of us!

The above was a most rewarding experience for I realized that what I thought was of use for language analysis and language teaching only was also of great importance in the fields of psychology and counseling. Non-verbal communication touches upon the whole person, as Birdwhistell says; and this is so to an extent we barely realize at present.

I have been discussing KINESICS above. A lot of research has been done on American nonverbal ways, but very little cross-cultural studies have been carried out as yet. I feel, however, the critical need is in cross-cultural communication research, a must for bilingual education and counseling. My hope is that many of you become motivated enough to do research in this field in order to enlighten your colleages as to those cross-cultural pitfalls that impair the effectiveness of your task.

For one person from any culture to understand what another person from his culture is saying to him, he has to be in perfect tune with that other person, in perfect synchrony in both the linguistic and non-verbal systems being used. (7) So that to teach phonetics, grammar and intonation without teaching their non-verbal accompaniments is to short-change the students. Everytime I came to the States, I felt I had gone deaf. Actually, I was simply confused in my non-verbal "hearing". At home, everything that is said is accompanied by gestures, and one expects that accompaniment in any language. When they are not present, the hearing and understanding of the foreign language becomes impaired. Last night I witnessed something quite interesting at the airport in Newark while I waited for my flight to Albany. Three American men were standing in front of me talking away. They had perfectly rigid bodies, they did not move much, and during one solid minute which I timed with my watch, one fellow made one gesture and another fellow another. I said to myself, "How can they understand each other?" Near them was a Hispanic fellow talking to a girl. I do not know whether they were Cuban or Puerto Rican. He made 35 gestures in one minute! They were not exactly facing each other. She was standing sidewise to him and would look this way and that way, establishing eye contact with him on and off. It was ears and eyes in action at the same time. I am sure in a more emotional situation the number of gestures would have doubled or tripled. In linguistic terms, gestures could also be described as redundancy. In languages and cultures, redundancy operates constantly in order to make sure the messages get across. Why do some cultures have redundancy in one area while other cultures have it in another? We don't know. But redundancy is everywhere. In an Anglo set up, and possibly in Nordic European cultures, the ear is trained very finely to react to the meaning being expressed in words, while in other cultures, you need both ears and eyes to catch the meaning being conveyed in words. If you are a member of this last kind of culture, when you lack the eye feedback, then you actually do not understand what is being said. In other words,

people who expect gesturing and profuse facial expressions to get meaning in conversations, must find it extremely difficult to understand people from a culture where gesturing is not used very much and facial expressions are kept at a minimum. When I realized this, I said to myself: "You are not deaf, nor is your English rusty. You are simply anticipating and missing visual cues which are non-existent here."

Because of the above, language practice in the speech laboratory seems to be quite useful in training Hispanics to understand actual conversations with Anglos. In the Lab, the only cue is sounds, and all Kinesics (movement) is absent. The students, however, will have to be alerted to the fact that when they face real Anglo and Nordic faces, kinesics will also be absent like at the Lab, at least by our Hispanic expectation.

The anthropologist Lomax from Columbia University has travelled the world over photographing the movements of people. He found out that these movements apparently were developed during man's early agricultural and fishing past. Some groups developed a rigid trunk while others developed a trunk that moves as if it were made up of separate units. Dancing, according to Lomax, follows the way one handles one trunk. (8) This was a very rich insight for me, and it explained a lot. I remembered then my convent school days in Emmistsburg, Maryland, long, long ago. Many Puerto Rican girls came to that College then. However, we were the only girls in that school who were given practice on how to march down the aisle to communion. I had been going to communion all my life! Why the marching exercises in Church? "Tummies in, hips in, shoulders straight!" Why all that nonsense? Why just us, Puerto Rican girls? It seems our disjointed and swaying walking was slightly indecent for the holy place, at least, from an Anglo viewpoint. The nuns were Irish.

I also understand now why Arthur Murray became a millionaire here in the States, but is practically out of business at home. The "merengues", "rumbas", and "cha-cha-chas" could only have come out of cultures that have disjointed trunks. So we don't go to academies to learn them, for

we walk them. In fact, the "flamenco" dance also comes from people who move as if their trunks were made up of parts. Actually, some of my colleagues talk as if they were dancing "flamenco". The only missing element is the stamping feet.

My belief, though, is that one must enjoy whatever one can do well, no matter what it is, for there is beauty in all kinds of movements. Remember classic ballet come out of countries where people walked with rigid trunks.

All this information is enriching, for it makes us less judgmental of others, and helps us realize that our cultural blinkers can make us extremely prejudiced and unjust. I hope you understand now that if a Puerto Rican gal comes to seek your counsel, and she starts wiggling all over the place, she is not flirting. She is simply behaving with a man or a woman as she was programmed to behave very early in life, and now she is repeating such programming completely out of awareness. Of course, there will always be flirts, but do not see one in every one of us. The implications for bilingual education are also many. Be very careful how you deal with your charges. If this cross-cultural understanding is not present, you will make out of your illiterate students, violent literate people.

Let me talk now about SILENCE and NOISE. Imagine a place where noise is a way of life! So it is among many of us Latins. A quiet Latin is not entirely all there, particularly from the Caribbean area. In fact, there is one saying in our Spanish regarding silence,and it has to do with graveyards. I had to learn to experience the beauty of silence here in the States, and I am richer for it. For most Puerto Ricans, however, silence is contaminating and jarring. There is another thing I also learned to understand here in the States, namely, privacy, for at home, we have no such thing. The word is there, but the American concept is not operant as yet. Privacy there refers to privacy within you, but never physical privacy.

My next topic is PROXEMICS, which studies space. In counseling, space is very important particularly in the interview process. I know that books on good counseling practices give you directives on how far

you should sit from your counselee, etc. However, the correct space for any interpersonal relationship is culturally determined and it varies from culture to culture. In some of them what is normal interpersonal distance becomes intimate distance in other cultures. Latins of the same sex interrelate at a shorter distance than Americans of the same sex do. If on top of that, your counselee comes from a touching culture, and she starts touching you, I am sure some of you would leave your office fast.

Latin space arrangements do vary among Latin Americans. In general, though, people of the same sex there interrelate quite close to each other by American or Nordic European standards. In fact, the space which is normal interpersonal space among Latins of the same sex, seems to be the intimate distance used in the Anglo and Nordic worlds among people of different sex.

I have seen pictures of people moving back and back right into a wall or a blackboard trying to regain their comfortable cultural interpersonal space, while the other person was also trying to do the same. This is called the "cultural tango." Two people of different sex in the Hispanic world interrelate in a wider space than their counterparts in the United States. On my sabbatical year in the States, I kept experiencing the closeness of American fellows who seemed to be on top of me all the time. Soon I realized it was not my incredible charm that was causing it, nor were they being disrespectful, either. It was simply a cultural difference in spacing. I then became much less defensive about it and actually tried to enjoy that very new experience.

American men seem to be permitted by their culture to touch girls who are their friends or acquaintances. But this is taboo behavior at home. So, be careful, you handsome and not so handsome men-counselors! Hispanic girls might get the wrong messages because of your space touching! You might be taken aback by their consequent behavior. Actually, you are courting them from a Hispanic perspective, without your knowing it, of course. And if you do something else with your culturally trained American eyes,--which I will tell you about right soon--they will "swoon" in front of you.

During my sabbatical year here in the States, I kept finding innumerable instances of behavior that were permissible in one culture but usually not so in the other. It seems we have here two main cultural drifts apparently hundreds of thousands of years old: The Mediterranean and the Nordic European drifts. An incredible amount of research is needed on these two cultural sources, and their contrasts and similarities.

Let me talk about HAPTICS now. Haptics studies touching. One of the things I also noticed when I got back home to Puerto Rico after a three year absence away in the States was that my female friends constantly touched me as they talked to me. They either pushed my leg with their fist, or fingers, hit my elbow, touched my shoulder, etc. At first, I found it strange. But in a week time, I was back at pushing and touching and rubbing bodies with women friends. Dr. Low Fordsdale from Teachers College, Columbia University quote in his book Non-Verbal Communication (9) a very short and casual but incredible experiment a psychologist did while he traveled the world over. This man went San Juan, the capital of Puerto Rico; to Paris; to Gainsville, Florida; and to London. At all these places he counted the times people touched each other in public places in a period of an hour. He found out that people touched each other 180 times in San Juan in a period of an hour. In Paris, he counted 110 instances of touching; in Gainsville, two instances of touching. I am sure they were Cubans. In London, zero instances of touching! Of course, those of you who are descendants of Italians or Jews touch a lot. But in London, and other Anglo-Saxon and Nordic European countries, there is simply NO touching!

At this moment, I usually have the men attending my lecture practice a Mexican "abrazo", a hug. Mexican men slap each others backs three times; then they step back and very rhythmically shake their hands three times as well. That is enough to throw an Anglo into a dive! I used to do that at lectures, but this is what happened: the men would go like this: (imitates Anglo men doing the "abrazo" who push their rear ends away, and keep their bodies very apart from the waist down.) It is just not done in the Anglo world. So I stopped my little drama.

The message I am trying to convey to you is this: friendship has different manisfestations depending on the culture involved. In order to feel friendly in one culture and to express that feeling, you have to hug, to touch, to be physically close. If you do not get it or give it, there is actually no friendship. For months I had to toil with a perturbing feeling of uncertainty regarding the friendship of my American friends who I finally concluded did love me although there were no hugs, no touching, and no physical closeness between us. It took me some time to learn to read the non-verbal cues and the very special verbal ones that mean friendship in an American setting. I am very proud of myself, because I was able to cross such a difficult cultural barrier and I have many, many friends to show for the real pain I actually experienced while doing it.

Puerto Ricans have to learn not to touch people of their same sex among Anglos, for it is highly uncomfortable and threatening for them. The lesson is a very dramatic one and very enriching, for one then learns that affection and all the feelings that are basic to man are expressed completely different from culture to culture. But the feelings are there. This is the important thing to realize.

I remember my friend Irene from Vermont saying to me, "Judy, why don't you stay, and interpret your people to us, and us to your people?" I felt that to be a very high compliment, and I have been doing that which she suggested to do ever since. But there is more than mere explanations in this matter of living together in multicultural settings. There is actually the effort, the agony and the risk of having to switch cultural channels in areas that can be insulting, hurting, and offensive as you switch. However, the pay-off is great, for in doing it one can then understand and accept and love. Until I faced up and actually experienced in my flesh and feelings the fact that Anglos were not being offensive, were not being insulting, were not being bullish, but were simply being different from me, I could not move freely and joyfully among them, among so many of them who later on became my very special friends. This also applies to you who are Anglos and have to move freely and

joyfully among Puerto Ricans, Dominicans, Cubans, Haitians and others. The adventure of stepping into another culture for real is frightening, but the new dimensions and experiences to be found constitute a heaven on earth. Stake out!

When you anticipate the trouble spots in cross-cultural relationships, the discomfort lessens to an incredible degree and culture shock actually disappears; fear, distrust, anger also diminish. I am sure you can narrate innumerable experiences where you were able to handle a cultural situation much better because you knew exactly what to do. Awareness can give us peace besides the necessary help for us to regain one's cultural stability, one's synchrony, when it is endangered by new surroundings or activities. In other words, the saving power is man's mind, plus his goodwill. Both can definitely be developed and strengthened through education. Let us hope such an education will eventually become the right of everyone and not just of minority and underpriviledged children as is the practice at present in biliugual education programs.

The next two points are crucial in cross-cultural interrelationships: POLYCHRONISM of MONOCHRONISM. Poly, meaning many at a time: Mono, meaning one at a time. Latin cultures are polychronic. They handle many things at the same time, in a way that looks like utter confusion and disorganization to Anglos. Anglo and Nordic European cultures seem to be monochronic. In other words, they do one thing at a time. In these countries, the clock becomes very important. You start one task, you finish it, and then you start another. Here the clock is indispensable to set limits for your tasks. At home, very few clocks are on time...if they ever run. However, a country is moving forward most definitely, but in ploychronic style with monochronic elements as well. At home, I have seen secretaries handling three, four things at the same time, or alternating from one task to the other quite easily and unperturbed: they type a bit, they search for a paper clip for one teacher, a piece of paper for another, answer the phone, sell vitamins, and on, and on, and on. Interruptions are the normal thing there. Can you imagine anything more rude from an Anglo point of view? I have American friends at home who actually feel

ill because of the constant interruptions. A student once said to his American teacher he had been outright rude to another student. The American teacher had said the following to this student: "Would you mind waiting a few minutes until I finish with Pedro?" A most acceptable and courteous American English expression...but a tremendous put-down for Caribbean people, I am afraid. Because they are polychronic, they have the right to be acknowledged and taken care of immediately when they approach someone as a newcomer. The tourists at home wait for their turn at shops, and of course, they miss it completely.

The Anglo monochronic pattern has to be taught to Caribbean people, and the Caribbean way to you. Otherwise, relationships are strained and communication suffers. I teach monochronism to my students through English dialogues, of course. At first, they cannot believe that such a thing exists in the world. Later on, as I explain the importance of the pattern in Anglo and Nordic European cultures, they feel very happy to role-play such an important cross-cultural skill.

These two styles of doing things within time structures run deeply in cultures. Polychronism at home is not just for stores or offices. It is in the home, in Church, in the movies, at buffets, simply everywhere. It is unbelievable for Anglo people. You have to be recognizing people always, acknowledging them. But this happens in many other cultures, according to Edward T. Hall, the anthropologist from Northwestern University, who has done exceptional research in this field. His books The Silent Language and Beyond Culture have invaluable material on monochronism and polychronism which you might be interested in looking up. (10) Hall feels that the Industrial Revolution could only have sprung from monochronic countries, as it did. It is based on the principle of doing one thing at a time, the assembly line principle, or rather, the monochronic principle of ordering one activity in time. The Industrial Revolution would never have started in the Mediterranean area. Here, the Revolution would have been circular, for the circle seems to be the prevalent pattern here, not the straight line. At a party at home, you have men in a circle and women in another, talking, gossiping, whatever. At a Christmas party at home last year, I saw the strangest thing happen.

The men were out in the patio talking away, and the women were in the living room. We laughed at something, and the men came in to see what the joke was about. In a matter of seconds both groups did an incredible thing: we switched areas. The women in one sweep stepped out into the patio, and the men stayed in the living room, taking possession of our former area. I stood there in the middle of the "migrant" groups, astounded at what I was seeing with full awareness and insight. I was looking at these two moving "bodies", moving in perfect synchrony, in a definite but unconscious choreography rigidly enforced by our culture.

One additional comment on these two areas, monochronism vs. polychronic people produce people oriented persons. (11) Both "tasks" and "people" are important elements in cultures, of course. The important thing is to figure out ways by which one particular culture can incorporate in its social system the style of behavior which is different from the inherited one, if it is useful both for the culture and its members. We, in Puerto Rico are trying very hard to be both monochronic in certain areas while remaining polychronic in others. It is a most interesting thing to watch.

And now, OCCULISICS. I believe Latins have what I call fan vision, because of their polychronism, while Anglos, because of their monochronism have tunnel vision. When Latins talk to others, they move both bodies and eyes, like oscillating fans. If you are talking to somebody, you do not establish too prolong an eye contact with him. The person who is listening to you does look at you fixedly. As one speaks, one keeps moving, but there is eye contact at intervals. As soon as you become a listener, you keep still, and you listen. In the States, whether you are the speaker or the listener, you keep close eye contact with the other person, and there is no swaying. If a Puerto Rican or a Cuban is talking to an American, the American feels the person talking to him is not interested in him because of all the swaying and the lack of prolonged eye contact. If an American is talking to a Hispanic, his steady look on the listener makes the Latin feel scrutinized or suspected. In case of girls, they feel they are being courted. Of course, you know there are cultures

where women are still not supposed to look into the eyes of men. Jean Bodman, from New Jersey, an English - as-a-second language specialist went to Iran as a consultant. Of course, she had been told she could not look at men's faces while talking to them. She had to bow her head. So she did...and became very ill after a week of the experience. She had to disappear from the scene for a while to regain her badly disrupted cultural synchrony. Most Puerto Rican women cannot look steadily into the eyes of men, sometimes even their husbands. Maybe our Arabic roots are showing there.

A child at home is not allowed by his culture to look at his parents when they scold him, which is completely the opposite to what an Anglo teacher would expect of the same child. A friend of mine who gives workshops to bilingual teachers told me how she had been explaining this point to a group of American teachers. She had asked them to be understanding and not scold a child for not looking at them while he was being scolded. That same day she went back to her home, and her adolescent boy did something she did not like. She scolded him immediately, but he did not bow his head. Right then and there she slapped him hard...for being so fresh! She had just been begging the American teachers not to get upset at the children. As you can see, it is hard to switch cultural channels; but it can be done!

I think I should stop now. A few last thoughts. I believe awareness can be taught. The need for such teaching is great at present. We should definitely move towards developing self-awareness in all levels of education in order to be able, first of all, to accept whatever we are; and second, accept others completely. Unless you accept who you are joyfully and proudly you cannot accept anybody else. Thank you very much.

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" CAN WE LEARN BY THEIR MISTAKES: ASSESSMENT OF MULTI-CULTURAL CHILDREN UTILIZING A TASK ANALYSIS APPROACH"

Dr. Judith Kaufman
Yeshiva University

The ethnic, cultural and linguistic diversity of our school population raises a great many questions for us as we serve in the capacity of evaluator, diagnostitian and program planner for these children. Although the issues have been inherent in these roles for many years and are not new ones, they are highlighted by the passage of Public Law 94-142 and New York State law 853, where in order to ensure "least restrictive education" for handicapped youngsters, non-discriminatory assessment procedures must be employed.

There is a certain ambiguity in the terminology. How can assessment or evaluation be non-discriminating when it is, in fact, the major purpose of assessment where assessment implies differentiation for purposes of evolving an educational treatment plan and the determination of patterns of strengths and weaknesses. There is also a lack of definition in the terminology, where non-discriminatory evaluation can be almost anything, with no assurance of quality or standardization. However, rather than argue the legislation or concept itself, let us focus upon the issues that are raised, what alternatives to "discriminatory" testing practices are available and attempt to reach some effective solution in carrying out non-discriminatory evaluation procedures.

After reviewing a multitude of studies, some of which include a good deal of empirical data and many which include social and political ideologies (for we are dealing with what is fundamentally a social issue), it becomes readily apparant that the traditional methods and measures which we have available for the evaluation and assessment of children from multi-cultural backgrounds are neither effective or relevant.

Prior to arriving at the major focus of this presentation, let us examine and analyze, using as a base the already available research, what alternatives are available. Clearly, to continue practicing the way we have been and to suffer whatever consequences emerge is neither

ethical, feasible or legal, particularly with the impact of the mandate for non-discriminatory evaluation.

Three alternatives which appear with considerable frequency utilize existing tests, but create variations on that theme.

(1) Translation of the test into the native language of the child. Invariably, bilingual (Spanish/English) children score far lower than their matched monolingual counterparts on verbal scales of intelligence (Darcy 1946, 1952). However, even when such tests are translated into Spanish, for example, it was found that the bilingual children did somewhat better than when the test was administered in English, but not as well as monolingual children (Anastasi and Cordova, 1953). Mendoza-Friedman (1973) states that "Chicano students in this country usually are not proficient in English or Spanish. For this reason it is no solution to simply translate standardized tests or instructional material into Spanish." Two other strong opinions are offered. Pintner, as early as 1927 (cited in Zirkel, 1972) stated, "it is perfectly absurd to imagine that any real comparisons can be made by translating tests from one language to another." Roca (cited in Zirkel, 1972) states that "there is no doubt that no matter how well an intelligence scale is adapted from one culture to another, there are cultural differences which will make the children from a second culture score lower than those from a first."

Therefore, we might conclude that merely translating standardized tests into the mother tongue does not give us a reasonable assessment of intelligence.

(2) Another alternative presented is to develop norms for each ethnic or cultural group rather than utilize "middle-class American standards." Such an alternative does nothing to change the nature of the assessment procedure per se, but merely changes the reference group.

Ramirez and Castaneda (1974) raised questions as to what results might be when Mexican American Children were evaluated against their own cognitive norms rather than against standard norms. They argue that Chicanos have a different set of cultural values and they are at a severe disadvantage when taking norm-referenced tests of intelligence.

The arguments for such an alternative, setting different norms for the individual groups may have positive components to it, and in fact such procedures are in operation. In New York City today, New York City norms are employed on standardized reading tests rather than National norms.

However two points should be considered. One is the issue that even within a particular cultural group, there are many differences, i.e. does one have different sets of norms for those individuals who have been in the United States for 2 years as opposed to 5 years, etc. What information does that give us beyond a particular score. More importantly, by utilizing individual group norms, we are not doing anything to alter the "process" of evaluation, but just the quantitative componenet.

(3) A third alternative which has been voiced is utilizing examiners of of the same ethnic background as the individual who is being evaluated. Rameriz and Castaneda (1974) point out, particularly for Chicanos, but for all cultures as well that there are differences in style and personality variables which need to be understood when administering a test. They indicate, for example, that a Mexican American child requires more supervision than an Anglo child, and that they tend to personalize relationships more; where they show little enthusiasm for school subjects per se but they will perform for an individual person.

There have been a number of studies yielding contradictory findings in this area. However, a general conclusion which might be drawn is that it is the examiner's style rather than ethnicity which effects tests performance (Zirkel, 1972).

(4) Another alternative which appears with frequency is armed warfare against existing tests. This issue may not be an alternative at all and may have no resolution. Indeed many of the position papers written offer no alternatives to standardized testing.

Mendoza-Friedman (1973) states "standardized tests do not identify actual intellectual capacity and potentialities. Most widely used tests stamp a child with a rating based primarily on his mastery of academic-type skills - most of all "verbal fluency."

John Garcia in Psychology Today (1972) analyzes I.Q. testing in general and the Stanford Binet in particular. He points out that the Binet measures only a "narrow sliver" of human abilities-academic skills and that the narrow artifical design of the questions makes the test invalid as a determiner of "genuine human intelligence and potential resulting in a middle-class white bias."

Three other alternatives which present themselves look to changing the evaluation instruments themselves,

(5) Using non-verbal as opposed to verbal tests. Several studies have pointed out that non-verbal tests yield higher scores than verbal tests for bilingual and multi-cultural populations. Altus (cited in Zirkel, 1972) noted that the average verbal WISC scores for Anglos versus Chicanos were significantly higher, but in the non-verbal areas there were no significant differences. These findings are consistant throughout the literature.

However merely using non-verbal tests may not be sufficient, particularly when considering the highly verbal nature of schooling. In addition, many non-verbal tests have, in fact, a heavy verbal component.

(6) The continuing search for the culture-free test Watson (1966) and Goodenough and Morris (1960) (cited in Zirkel, 1972) concluded that the search for a culture-free test is futile. Since "culture" is in fact a part of every individuals' functioning, in every component of living, to create an instrument, if it were possible, which would be entirely culture free would be as discriminatory as any other instrument available.

(7) Creating alternative methods and concepts for assessment. Work in this area has been primarily twofold and brings with it some exciting concepts. One approach has been to look at "adaptive behavior to assess functioning, where the teacher must become a partner in the assessment procedure. Mercer examined behaviors of adults who had been labeled as mentally retarded or subnormal and then compared it with other evidence and found that day-to-day functioning was adaptive and effective.

There are many exciting positives inherent in such a procedure, however, teachers must be trained and cannot be expected to be effective evaluators without such training. The focus of such assessment is on

the "here and now" which is certainly crucial. But at the same time, as educators, we need more information about learning styles and approaches as well as levels of concept attainment.

The other approach, which has most recently caught on is utilizing criterion reference testing which is on the opposite end of the continium of assessing adaptive functioning it seems. In Bilingual Testing and Assessment, put out by the Bay Area Bilingual Education League (BABEL) in California, criterion reference testing is seen as the only available alternatitive in the assessment of multi-cultural children.

However, C-R testing is achievement oriented and is directed to what is learned and what is not learned, geared directly to "performance objectives." Within this technique there are many exciting concepts, but may itself have limited application. The individual writing the performance criteria needs to be skilled in assessing accurately what the criteria to be measured are and what needs to be done. The results, however, may emerge as situation specific.

Having spend a good deal of time in exploring what the alternatives are, we now come to the main point of the presentation. My goal is to lead you to a different alternative, that is to begin by using the existing instruments we have available, but utilizing the results in a somewhat different way - through a task analysis approach defined as analyzing and knowing what steps are required in the learning of a task, and to pinpoint wherein the process learning has broken down.

Before I continue, I do not have a prepackaged program or technology to offer you, but merely a technique to share. I believe that shortly we will see a flourish of instruments which will be called "non-discriminatory evaluation instruments." Before jumping onto that particular bandwagon, I believe that we have the responsibility of exploring a flexible way, the instruments that we already have, before throwing them away.

I will approach the task analysis technique with you through example and sharing some research, thinking and experiences. Of course a

fundemental issue which needs to be confronted is, what is the purpose of evaluation and why do we do it. This issue has enough controversy in it for a workshop of several days duration. At the risk of seeming directive, I see evaluation as an area where we determine what children can and cannot do, what their general skills and abilities are, what styles and approaches are, how they go about meeting task demands, and how learning can be modified to enable a child to succeed where he/she has previously failed, over and beyond cultural and linguistic differences.

Glasser and Zimmerman (1967) state that the kinds of success and failures or mistakes rather than statistical treatment of scores offer a qualitative phenomenological profile of personality attributes of vital significance (p.6). The point of "How" of test responses rather than the scores is of primary focus. Therefore our concern is the "process" of intellect rather than merely the results in terms of standardized scores.

An important assumption which I make is that each educational system, school, program and/or teacher has its own set of values and goals and that a child's success is determined by whether or not he/she meets these goals. Therefore the process of learning and ability is a crucial variable to understand.. Haeussermann (1971) emphasizes this point when she states that in order to plan effective educational programs for a child, it is important to understand the pattern of his learning - how does the child arrive at a solution, and what is the basis of failure.

I realize now, retrospectively, that what many of us having been doing in our assessment procedures, what I have focused in on in the research area has been a task analysis approach, however there was no label for it when many of us began. Let me point this out with a few examples. The Bender-Visual Motor Gestalt test is one that is familiar to all of us. The test is an easy one to administer, using the Koppitz scoring system or any other is simple to qualify, and takes a relatively short time in its administration. As a result, it is employed frequently in practice as well as research and a great many claims are attributed to it.

Lillian Zach and I became concerned with the number of "perceptual deficit" labels which emerged based upon the administration of the Bender and sought to determine what factors are responsible for successful performance. In analyzing the task itself, in the simplest terms, it seemed that a child needs to have "motor capacity," discrimination skills and the ability to translate the visual image into motor performance. One might also need verbal mediation skills, that is the ability to label in some way the figures, but in an earlier study (1969) we found this to have a negligible effect. There is also the assumption that the skills are hierarchically organized, that is that discrimination preceeds visual motor performance. We devised a discrimination test in which the child was requested to select that figure which looked like the standard, which was administered along with the standard. In analyzing the results of kindergarten children we found that there were children who did well on both tasks, poorly on both tasks, and those who were able to successfully discriminate, but had difficulty with visual-motor performance. These results were expected. The unexpected findings however, were that 25% of the population were able to perform in the visual-motor task, but did poorly on the discrimination task. It seems that by these findings there are different types of discriminations required based upon different kinds of task demands, where for discrimination for matching one kind of inspection is successful and for discrimination for reproduction another kind of inspection is necessary. The implications for intervention are overwhelming, and unsuccessful intervention may be imposed because of a lack of understanding of task demands.

Diller and his associates (1971) worked with adult hemiplegics, utilizing the Block Design subtest of the WAIS. Their goal was to investigate changes in performance by altering the nature of the presented task. They arranged a series of cues, starting with minimal and increasing to maximal explicitness to enable a subject to pass where he had previously failed. Each cue had an inherent strategy, and therefore the process of the individuals approach could be evaluated. Indeed, if we look at the way in which we administer the Block Design on the WISC-R, we can see a

pattern of cueing emerging. Initially, we make a three dimensional model and have the child copy that model. When that has successfully been accomplished, we present a two-dimensional model and have the child copy it. Gradually we remove the line cues which are present, until ultimately the child begins to structure the experience for himself.

For a final example, we all engage in a task analysis approach when evaluating the literature we read. Very often we find contradictory findings in comparable pieces of research, as is certainly true in an area that I am most familiar with, sensory development. The major factor which always seems to emerge is from the procedure section of the study, where one finds different tasks being given in the different experiments. In many cases, therefore the results cannot be expected to be comparable.

What exactly is task analysis and what are its goals? Primarily task analysis can be seen as the process of analysing tasks or behaviors into its component parts, in terms of what is required on the part of the learner to perform to the expected outcome. What skills, abilities, information and concepts does the learner need in order to be successful at the task? We can then begin to look at patterns of strengths and weaknesses which might be task specific, the child does not know where bacon comes from (this might be cultural or environmental) or may permeate a wide variety of tasks and may be deficits which underlie a wide variety of functioning irrespective of the nature of the task, the child has difficulty in sequencing material whether it is presented verbally, visually or tactually.

The literature today is beginning to present different methodologies for approaching the breakdown of a task. Myklebust and Johnson employ an input-output, sensory mode approach. That is, what sense systems are required in order to complete the task, in its stimulus side and then in its response side. That is, in digit span, the input requires listening or audition, whereas the output requires verbalization as well as a kinesthetic component. As the task becomes more complex, this approach seems to become unwidely.

Donald Smith utilizes a hierarchical approach, which appears to make more sense for complex tasks. He has primarily applied his technology

to the process of reading and writing, however, I believe it can be successfully translated into use for our evaluation instruments. He asks, what are the skills and abilities required to complete the task, and which skills come first in the sequence, developmentally and hierarchically. In order to complete the Smith approach, I feel it is necessary to also incorporate some of the modality approach of Mykelbust and Johnson's.

We are still talking in the abstract. Let us turn now to some of the test items and tasks we are familiar with, for example the subtests and separate items on the WISC-R. It would be impossible to go through the test item by item at this particular point. Therefore I will select a few relevant examples for illustrative purposes.

The overall assumptions which we need to make are that we are evaluating performance independent of overall score, that we have some knowledge of developmental processes and age related skills i.e. would you expect a child of five to carefully execute a diamond, when developmentally he is not expected to do so until the age of seven, and that test items are arranged with some order of logic.

Looking at the Object Assembly subtest for a moment on the WISC-R, apart from the overall demands that the task creates, that is to integrate separate units into a meaningful whole, to utilize visual organizational capacity, shape and line cues, each separate item within the totality of the whole subtest brings with it task demands. The first item ... girl give the subject a verbal label, "this is a girl" as well as line cues, while the second item gives the subject the verbal label without any line cues. The third item does not give any verbal label, gives line cues but includes perspective, while the fourth item (face) gives no verbal label, minimal line cues and involves a breaking of set in order to rotate a crucial piece in its spatial plane. On one protocol, for a child, chinese - bilingual, of 11, he received maximum credit for all of the items except the third where he received 1 point. Shall we conclude that the test was culturally biased and this particular child has never seen a car, or that he has difficulty with car puzzles? Or can we generate the hypothsis that he may have difficulty with perspective in two dimensions and begin to evaluate his performance on tasks that have

similiar demands.

Looking at the information subtest as another example, and certainly this test is fraught with cultural piases, may reflect environmental stimulation and academic achievement, one can still obtain a great deal of information when using a task analysis approach. Aside from the overall task demands of such a subtest, that is hearing, retaining information, pulling discrete pieces of information from storage, making appropriate associations to questions, etc. the items within the test have specific demands. Some items refer to specitic numerical concepts, some with direct human information, and with different areas of study. Take for example a child of 11, Hispanic, bilingual who obtains a scaled score of 11 on the information subtest. This score was obtained because the child was able to respond correctly to any item which required discrete numerical responses, how many pounds in a ton, how tall is the average american man, etc. However she missed much easier items on the same task. Do we conclude that she is unable to master specific pieces of information? Or in this case that there might be a cultural deficit?

Another variable which must be taken into account is the ways in which children fail, which may be indicative of response styles, cognitive styles, areas of deficit. The child who generates a wrong answer which is within the general context of the question, as opposed to the child who is completely away from the tasks demands are giving us two distinctly different patterns of functioning.

One further illustration comes from functioning on the Bender. Utilizing the Koppitz scoring system, on certain cards, if the individual draws more than the requisite number of dots, we score for a persevation error. In fact, if we look at the card, the design reaches from one end of the paper to another and the child may not be persevrating at all but merely replicating the design as it is presented to him in the global pattern.

These are but a few illustrations of analyzing the task characteristics, but I hope that I am communicating my point to you. Some of you may go

away disappointed in that I am not offering you a new instrument, whereas others of you, hopefully may begin to be excited in seeing the potential of utilizing our test information in a way that may be meaningful for educational practices, which I believe is our primary aim in educational practice.

I have evaluated the current approaches to standardized testing practices, and although I may be rigid in my thinking, I have not come away yet with the feeling that there is any visable alternative to what we already have. I am not prepared to throw away "tradition" if you will in the assessment of multi-cultural children. Yet I feel we need to expand the base of evaluation, utilize different methodology in the eveluation of our results and also to incorporate some new approaches to a traditional battery, that is to evaluate adaptive functioning in some systemitized way.

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" THE PRESERVED AFRICAN RELIGIONS IN THE CARIBBEAN: VOODOO, SANTERIA VIS -A- VIS TEACHER-STUDENT RELATIONSHIP IN BILINGUAL BICULTURAL EDUCATION "

MR. HENRY FRANK, ASSISTANT COORDINATOR
CARIBBEAN STUDIES, EDUCATION DEPARTMENT
THE AMERICAN MUSEUM OF NATURAL HISTORY
CENTRAL PARK WEST AT 79TH STREET, NEW YORK, N.Y. 10024

Among the African retentions in the American continent more especially the Caribbean, the religious beliefs and practices seem to captivate our attention the most. Actually they have survived in spite of colossal efforts on the part of the colonists: Spaniards, English, French, Portuguese alike, to destroy every single trace of them and also the determination of some contemporary governments or religious groups to eradicate entirely their vestige. The most active ones are Cumina in Jamaica, Candomblé or Macumba in Brazil, Chango or Nagos in Trinidad, Voodoo in Haiti and Santeria in Cuba, Puerto Rico and other hispanic countries. Unfortunately these preserved African religions have been misconceived by many people including some educators in this country. In this presentation I will attempt to give some insight into Voodoo and Santeria vis-a-vis Teacher-Student relationships in Bilingual Bicultural Education.

Although the melting pot theory has been replaced by the more sensible concept of Cultural Pluralism, (at least in the framework of Bilingual/Bicultural Education) not enough emphasis has been placed on the cultural make-up of the non English speaking students in relation to the training of the bilingual educators. For instance, how many teachers who do know about the elements of Voodoo or Santeria? I presume very few. Because during their training they have not been exposed to these religions which constitute one of the most important aspects of the African heritage in regard to the Caribbean culture.

One has to bear in mind that many students in the bilingual programs are Caribbean descents and therefore grew up in families where these religions have been practiced faithfully. Some of them may have

their own parents being the head of these cults. Automatically, they become an integral part of their cultural milieu and a very sensitive one which their teachers have to deal with. A teacher who is not familiar with Voodoo or Santeria may view these practices as demoniac and as a result develop a very bad attitude towards the students whom parents are practitioners or who practice them themselves under the guidance of their parents or relatives.

In one of my exposes' on Voodoo at the American Museum of Natural History in New York City a young mother approached me once and told me that she had to transfer her son from his regular school to another one because his teacher made an alarming remark to the child regarding his wearing a Chango necklace. That child was so upset that before the trimester was over, he developed an acute complex of insecurity and the only solution was to dissociate him from that insecure environment; therefore, the mother was obliged to have him transfered to that other school. This kind of attitude on the part of the teacher creates animosity between him and the student. It has a terrible psychological effect on the latter and may impair his functional abilities especially his cognitive functioning.

In another case a child, in one of the school districts in New York, was referred to a mental institution by a school psychologist, because he was complaining about seeing spirits in his dreams. Such an action on the part of the psychologist was clearly the result of her lack of information about Voodoo or Santeria.

Besides the teachers, those who have the responsibility of non-biased assessment of the non-English speaking students must also equip themselves with all the aspects of the cultural patterns of the students they are serving. There is no doubt that those cultural implications may affect a student's response in a testing situation or otherwise. The cases that I have above mentioned can be true for any educator who has not been informed of Voodoo and Santeria or has been exposed to bad publicity about them. For many people these religions are synonimous

to sorcery or black magic (I would rather say "bad magic" instead of "black magic"). One may ask: How did this negative image come about? The answer is simple: Some social researchers, before they even left Europe or North America for the Caribbean Islands, nourished the idea that they were going to meet Satan face to face in these islands. Upon returning home their report would reflect exactly their preconceived ideas. Besides, there is the novelist who does not mean harm but has discovered a lucrative topic. He would spend two or three weeks in Haiti, Puerto Rico or Cuba, just for the record, investigating fake ceremonies. When he came back he knew more about Voodoo or Santeria than the natives themselves. In fact his novel would be no more than the product of his fertile imagination. His story then would be picked up by an avid or naive movie producer in quest for sensationalism. The result would be a movie on Voodoo or Santeria showing zombies coming up from the ground or dolls against which pins have been stuck and someone would get killed somewhere. The adverse publicity came also from the clergymen of other sects mainly protestantism and catholicism. They know that these religions are very popular among the masses and can be an obstacle to the successful propagation of their faith, in occurence they establish their campaign of degradation accusing the voodooist or the santero of paganism. Those who are exposed to this kind of distortion get really confused. To dispel some of the confusions that exist about Voodoo and Santeria and for the edification of the bilingual educator I propose to shed some light onto the matter.

Voodoo and Santeria are religions whose objective is benevolence. They are not to be equated with sorcery or "black magic". On the contrary both religious practices are used to counteract evil and harmful action of the sorcerer. In catholicism there are the saints in Voodooism or Santeria they are the loas (or orishas in Santeria). Their main function is to protect the devotee and to secure his well being.

These african religious concepts involve invocation, offerings, initiation rites, burial rites, marriage rites, drum beats, dance, songs, etc., in conjuction with the gods and goddesses of their pantheon.

Though closely related Voodoo and Santeria elements are in some respects separated. The fact is that the former is derived mostly from the Fon people of Dahomey and the latter is influenced by the Yoruba people of Nigeria. Furthermore, while Haiti was under French rule, Cuba and Puerto Rico were under Spanish control. The word voodoo is a corruption of the fon word "vodun" which means deity or spirit. It is the equivalent of orisha in Santeria, a Yoruban word. The Haitians however prefer to use the word "vodun" to identify the cult and select "loas" a Congo word to signify deities. On the other hand, the name Santeria is derived from the Spanish word santo (saint) of the Catholic religion. It was given to the cult by the Spaniards. Lucumi, which is derived from the Yoruba word akumi, is the real name of the religion. It is to be noted in Voodoo Fon words are frequently used, in Santeria, however, Yoruba words are constantly utilized. But basically the current language in Voodoo is Creole (a mixture of 60% of French with some African and Indian languages and dialects, English, Spanish, etc.) in contrast to Santeria where Spanish is the key language.

Despite some divergencies between these two, their rites are not greatly varied. The Houngan who is the Voodoo priest is the equivalent of the Babalawo in Santeria. The female counterpart in Voodoo is Mambo. Their function is the same. They officiate all ceremonies and occupy the top echelon in the hierarchy of both religions respectively. The Houngan or the Babalawo, is the spiritual leader who guides the devotee and helps him solve his or her problems supernatural or otherwise. In Voodoo there are the Hounsis (Fon) or servant of the gods who assist most of the time the Hougan. Ceremonies are held in the Hounfor (Voodoo temple) or the ileocha (Santeria temple). They are taken place for various occasions; it can be for either thanksgiving, curing someone, forgiveness or to celebrate a god's day.

In the concept of the Voodoo or Santeria religion everyone is assigned a protective guide upon his or her birth, who is a loa or orisha. As a matter of fact, these religions have a very extended pantheon. For your edification I would like to mention just a few gods in both cults.

In Voodoo, for instance, Legba is considered as the god of the gods. In every ceremony, they have to start by honoring Legba. He is the god who can communicate with all the other gods because he speaks their languages. Legba is the god of doors and crossroads. His equivalent in Santeris is Ellegua'. Oggun is the god of war and iron, he is the warrior and the blacksmith of the pantheon Voodoo as well as Santeria. Chango is considered as the most popular of the gods in Santeria. He is the god of thunder and fire. He has the same attribute in Voodoo. Erzulie Freda the goddess of love and gold is very popular among the Haitians. Her equivalent is Oshum in Santeria. Damballah is the god of fertility, he is represented by Yemaya in Santeria who is very helpful to women who cannot bear children. Obatala the god of purity represents heavens in Santeria. There are, however, gods in Santeria who do not exist and do not have any equivalent in Voodoo and vice versa. Orunla is one of them. He is the god of divination, the master of past, present and future. He is the owner of the Table of Ifa. The table of Ifa' which is not used in Voodoo, is composed of eighteen sea shells. The babalawo make use only of 16 for his predictions.

The gods, in effect, are very specific about what they want in terms of sacrifices (food, drink, etc.) and their color of preference. For instance Oggun drinks strong white rum while Erzulie prefers champagne. He likes red and Damballah likes white color. By the way, there is a tendency for some people to believe that human sacrifices have taken place in Voodoo or Santeria ceremonies. There is no such sacrifices during these ceremonies but rather animal sacrifices such as goats, pigs, roosters, etc.

Although the gods are benevolent they are capable of reacting violently if the devotee does not keep his promise in relation for example to an offering either a "mange loa" (food for the spirit) or an object which can be a kerchief, a dress, etc. in favor of the god in question. This person may get very sick until he fulfills his promise. They also can react with violence against someone who wants to harm their protege.

Protection means very much for the voodooist or santero. In Santeria for example in very difficult cases the santero may address himself to "Las Siete Potencias Africanas" (The Seven African Powers.) They are Obatalá, Ellegua, Chango, Oggun, Orúnla, Yemayá and Oshún. These gods are extremely powerful together. In the theoolgy of both religions the existence of God is known, he is referred as the Great Master. However, the believers don't aim at seeing God. He is too far and too preoccupied with various needs of human beings. It is easier to reach the spirits who were created by God to help them solve their everyday problems.

Religion, the the African theological spectrum, is viewed as an exchange between man and supernatural beings in order to secure human life on earth. Therefore, the character of the African religion, is contrast to Christianity, is geocentric. The concentration is not upon the hereafter as for the christians but upon earth. They aim at joining the ancestors in the spirit world instead of trying to make it to heavens like the christians.

One of the main features of the preserved african religions is possession. The gods communicate with the devotee either by incarnating themselves in them or appearing to them in dreams. In possession, actually, the loa or orisha moves himself into the head of the individual who becomes his mouth piece. The person becomes the horse of the god. The action and the words of the possessed are action and words of the god by whom the person has been "mounted". The Hougan, when he is possessed, becomes a super human being who can accomplish unthinkable deeds. The psychiatrist or psychologist who is always quick to diagnose would label falsely this state of trance as neurotic symptoms. The explanation for possession is the following: Everyone carries within himself, according to the beliefs, two souls. One is "Tibon ange" (little good angel) which is responsible for a person's general condition such as tiredness, sleepiness, hunger, etc., the other is "Gros bon ange" (big good angel) which relates himself to the faculties of thought and feeling. When someone is about to be possessed the "Gros bonange" is driven out by the god who takes over his position. This explains why the possessed always gives the impression

in the first stage of possession as he loses control of his motor system.

Possession is specific to the god. The person is possessed by Damballah, the snake god, crawls like a snake or may climb the highest tree while the one who is possessed by Erzulie the goddess of love becomes very sensual and may decide to kiss everyone around him or her.

There are two types of possession: bossale and controlled. In the bossale possession the person is wild. It is said that the loa by whom he got possessed has not been baptized. The baptism of the loa is taken place during the initiation rites which is called Kanzo in Voodoo and Asiento in Santeria. Initiation is a very complex rite during which the loa or orisha is fixed in the head of the devotee by a houngan or a babalawo. This person has much more control of himself or herself when possessed. In the case of Santeria the babalawo has to make sure that the right orisha has been fixed in the head of the santero. Because multiple problems can be engendered for the santero whom the wrong orisha has been fixed in his head.

It is to be noted that Voodoo and Santeria are family religions which means that one may inherit a loa or orisha from his or her parents. There is in fact, a special ceremony to take the spirit off the head of the devotee when he is dead. The spirit is put in a gôvi (pot) and placed somewhere in the Hounfor under the direction of the Voodoo priest.

It occurs that both religions are syncretic not only in terms of the many African religious practices with one predominant aspect but also in regard to other beliefs which were strong in the Islands particularly catholicism, the religion of the majority of the slave owners. A good example is that many gods of the Voodoo and Santeria pantheon are represented by catholic saints. The following is a list of a few of these gods and goddesses and the saints to whom they correspond:

Gods and Goddesses in Santeria and Voodoo	Corresponding Catholic Saints
Damballah (Voodoo), the snake god	Saint Patrick
Chango (Voodoo-Santeria), god of thunder and fire	Santa Barbara (Santeria)
Legba (Voodoo), god of doors and crossroads	Saint Lazarus or Saint Peter
Obatalá (Santeria), father of the gods	Our Lady of Mercy
Erzulie Freda (Voodoo), goddess of Love	Mater Dolorosa

Gods and Goddesses in Santeria and Voodoo	Corresponding Catholic Saints
Erzulie Dantor or Dahomey (Voodoo), goddess of love	Mater Salvatoris
Oshún (Santeria), goddess of love and gold	Our Lady of la Caridad del Cobre
Elleguá (Santeria), keeper of doors	Holy Guardian Angel
Oggun (Santeria-Voodoo), god of war and iron	Saint Peter (Santeria) Saint James (Voodoo)

As it could be observed from the above list, a god in Santeria may have the same attribute of a god in Voodoo but each one is represented by a different catholic saint, such as in the case of Oshun and Erzulie.

A good explanation concerning this god-saint identification is that the slave owners wanted their slaves to practice catholicism and repudiate their African beliefs. To reinforce that approach they supplied them with images of catholic saints and taught them catholic prayers (in Voodoo as well as in Santeria catholic prayers are still preserved). Those who resisted being converted were flogged to their blood. In order to avoid such punishments they would accept the images from their masters but identify them with their own gods by looking for signs of analogy in each one. For example, Damballah, the snake god, has become Saint Patrick because of the snakes at the feet of this saint; Oggun, the god of war, is represented by Saint James because the latter was a warrior and is portrayed as such and so on. Actually the slaves fooled their masters by kneeling in front of a catholic saint, because in reality they were communicating with Chango, Damballah, or anyone of their gods.

The Arawak Indians, commonly called Tainos, have also contributed to the syncretism of Voodoo and Santeria. The constant use, for example, of tobacco (pipe, cigar) by the Hougan or Babalawo in some ceremonies reminds us of the use of Tobacco during the Cohoba ritual by the Bohite (Indians high priest). One of the most important contributions of the Tainos to Voodoo in particular is the drawing of Vèvès. Vèvès represent the emblems of the gods. Symbolically they replace the statues or images of saints identified with the loas. They are traced out mostly with cornflour by the Hougan on the ground where the ceremonies are taken place. We have observed that there is a very close resemblance between veves and the petroglyphs of the Taino Indians which are found carved in rocks in Cuba, Haiti, Puerto Rico, Guadeloupe, etc. The drawing of Atabeyra, the goddess

of fertility, for example, was used by the indians ritualistically, the same way the vêvês are being used by the Voodooists.

Although in Dahomean Voodoo, vêvês are also traced out but they are in a single straight or circular line while in Voodoo they are very elaborated with multiple lines similarly to the Tainos petroglyphs. However, there is no indication that the indians drew their ritual symbols on the ground as the voodooist do, but it has been observed that the south-western indians particularly the Navajo Indians in Chinle Arizona who can be considered as the cousins of the Tainos have their sand paintings on the ground and traced out by the Shaman, the Houngan's counterpart. The sand paintings and the vêvês play the same ritualistic role. We have concluded that the Tainos probably drew also on the ground during their religious ceremonies; unfortunately not enough research have been made to this effect.

I hope that this presentation has given you a good insight into what Santeria and Voodoo are: religion not sorcery. However I don't want to give you the impression that sorcery does not exist in Cuba or Haiti or any other country in the Caribbean. Yes it is strong in this part of the world; but remember it also exists in France, Germany, Egypt, etc. There is a tendency for many to identify all evil practices with Africa or African "derivatives". It is a very bad way of thinking. In Haiti, for instance, many sorcerers got their knowledge from books published in France or written by Frenchmen. Two of them are: "La poule Noire" (the black chicken) and "Le Grand et le Petit Albert" (the old and young Albert) which are very powerful and that I would not advise you to read.

My intention is neither to convert you into Santeria or Voodoo nor to make a defense for these practices but rather to inform you about some elements of this important cultural aspect and to make you aware of its implications on the education of many of our Caribbean children. This exposé, moreover, is not solely intended for bilingual teachers as it is indicated by the title but it is also addressed to administrators, examiners, social workers, counselors, test makers, psychologists and all those who are responsible for the education and the well being of the non English speaking students.

PRACTICAL CONSIDERATIONS IN THE PSYCHOEDUCATIONAL ASSESSMENT OF MINORITY CHILDREN: THE CASE OF BILINGUAL HISPANICS

Ms. Maria D. Alvarez
Institute for Urban and Minority Education
Teachers College, Columbia University

Introduction

The following presentation will endeavour to conceptualize and analyze a number of practical problems that arise in any attempt to carry out psychoeducational assessments of Spanish speaking children. To carry out this task I will focus principally on problems which have arisen in my own work in the psychoeducational testing of bilingual children, of monolingual speakers of Spanish, and of monolingual speakers of English. I will attempt here to synthesize a number of patterns that have emerged from my own data and discuss a number of insights that have been generated during my several years of work as a School Psychologist in the public schools of several urban northeastern school systems.

Changing Perspectives in Psychoeducational Assessment

Paradoxically, the task of understanding psychoeducational assessment will be thwarted if we narrow our focus and confine our observations to the testing situation itself and to the performance of the Hispanic child in this situation. What happens in the microcosm of the testing situation can be understood only when the surrounding institutional macrocosm is somehow taken into account. For this reason, it would be desirable to approach the task withing a broad systems framework. That is, a complete analysis would expose the manner in which many of the problems that occur in the testing situation are created, heightened, and sustained by features of the school systems and administrative systems within which testing is embedded.

Even at the level of the individual child, a broader perspective would be useful. The days are hopefully past when serious professionals

will base their evaluations on narrow paper and pencil intelligence testing. Most psychologists are becoming increasingly aware of the need to include medical, family, and school data as an integral part of their assessments. At the same time there has been a movement towards expanding the focus of psychoeducational evaluations. Of particular interest is a growing away from the clinical model that looked only at intellectual and personality data. Just as Clinical Psychology has been freeing itself from the domain of Psychiatry, so also I believe School Psychology should be freeing itself from the domain of Clinical Psychology as traditional practiced. Because our focus is on children who are involved in the formal teaching-learning process, it is imperative for us to focus our attention on problems that are salient in the specific context of the culture of the school, rather than mechanically transposing concepts and procedures more appropriate to a clinical setting.

In this light, and in view of several large societal changes of the last decades, several preliminary generalizations suggest themselves.

1. The day has passed for global, wholistic evaluations based on descriptive scores such as IQs, stanines, percentiles, grade levels, and the like. Especially for psychologists who work in schools it is particularly imperative that our findings be individually meaningful, and that they lead to specific recommendations, and to specific courses of action rather than to serve the purpose of labelling individuals. The long-felt need for turning the diagnostic process into a diagnostic-prescriptive process is becoming steadily clearer.

2. The days of one-shot evaluations that end in a carefully composed "Psychological Report" are, in my opinion, also gone. We have become aware that more and more frequent observations are required if we want to minimize error, and that observations in settings other than the examination room and the classroom may also be in order. In the same fashion, follow-up of cases should be seen as an integral part of the psychoeducational diagnostic process. It is only through follow-ups that we can test whether our hypotheses and hunches have been on

target, or whether they should be modified. And it is only through follow-ups that we can verify whether and how our recommendations are being implemented.

3. While it will never be possible to eliminate the existence of special classes for students with very special learning needs, the day for speedy segregative interventions is, in my opinion, also past. Rather, our aim should be to design individualized intervention strategies that can be implemented within the regular classroom with the help of the teacher herself or her assistant, or within the context of a resource room. There should be greater reliance in gradual intensification of input rather than on automatic segregation.

4. The day is also gone for the construct of intelligence, as conventionally measured, to be considered the central and most crucial variable in the psychodiagnostic process. The concept of IQ has fallen under suspicion, not only because of the uses and misuses that have led to the activism of civil rights groups, but also because insights from other fields such as Learning Disabilities, Reading, and Curriculum and Teaching, have contributed to demystify and deemphasize IQ's impact. But also, we ourselves, through our direct contact with teachers and school personnel, have come to realize that the crux of the matter is that a child is entitled to learn and that it is more important to focus on how that child learns than to find out how bright that child is with respect to group norms, that it is more important to get a measure of how the child functions in diverse cognitive areas, than to describe his functioning in terms of global, undifferentiated measures. By the same token, it is also desirable that we expand our focus so that we assess functioning in other domains such as experiential background, concept confusion, perceptual-motor integration, sequencing of various sorts, gross and fine motor skills, spatial orientation, visual vs. auditory processing of information, as well as other aspects that have been found to impinge on children's learning. We also know that language, because of its high impact on school functioning, deserves more explicit diagnosis. And this is especially true in the case of bilingual children.

5. Most people would agree to the fact that the traditional "expert" model, whereby the School Psychologist would concoct a series of recommendations that other people would then carry out, is not as satisfactory as a model which involves collective input from all people involved with the particular child.

6. The instruments we have been using in psychoeducational assessments are also under scrutiny and some have been heavily criticized, so that now we ourselves are becoming more aware as to what biases are and how to detect them, and are working out ways of modifying the use of such instruments. Others among us are going ahead and developing alternate approaches, alternative measures, or even reviewing the psychoeducational assessment model in its entirety. Still others are questioning whether we should bother modifying it at all.

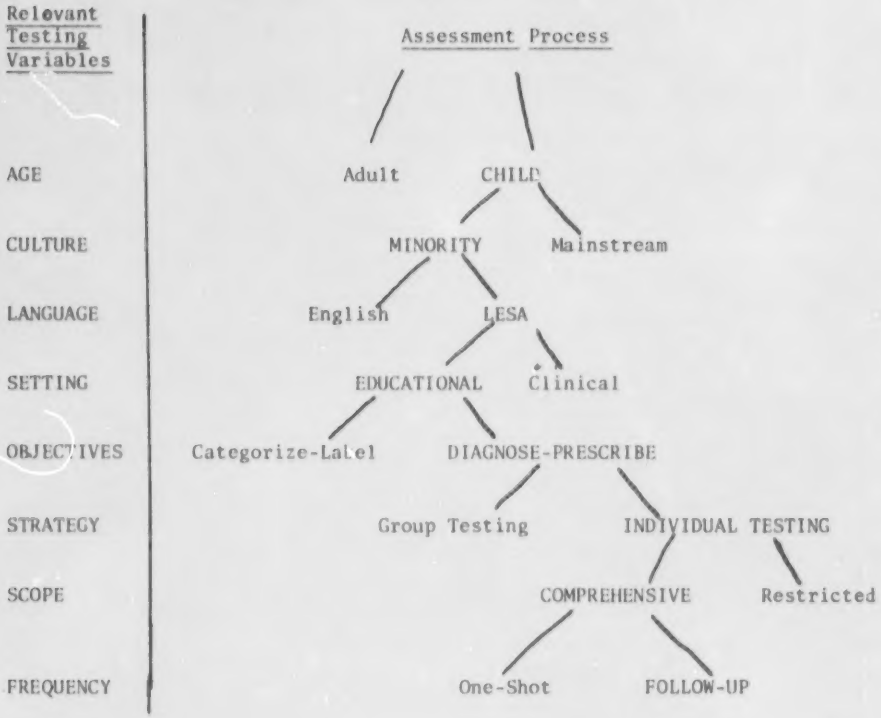
Despite all those very encouraging trends and despite both individual and legislative efforts, we still come across less than ideal situations. There are still a good number of psychologists who continue labelling, who make less than useful assessments, who ignore the special characteristics of minority students that would invalidate testing conclusions, and who go as far as to fail to take into account the dimension of language when dealing with bilingual children. That is, even though better techniques are available, there are broader forces working for the perpetuation of archaic procedures. It is in this sense that I am convinced that problems withing the microcosm of the psychoeducational setting will not be resolved unless we simultaneously try to deal with larger issues within the macrocosm of the school and of society at large.

Schematic Overview of the Testing Field

For the present, however, I will concern myslef with the testing situation. To begin with, I have found it useful to draw a general map of the field of testing, specifying the different types of testing that can occur. Figure 1 roughly represents my own cognitive map of the testing field. Going down the left hand column are a number of important variables which it is useful --and occassionally necessary-- to distinguish.

See Figure 1 on page 85

Figure 1



The first three variables are subject variables. From the point of view of the psychologist, the variables of age, culture, and language produce such tremendous individual differences as to call for modifications of at least some aspects of the assessment procedure. The variable of age needs little comment. It is clear that adults and children should in general not be assessed by the same instruments--not even perhaps by the same individual. Psychologists themselves will frequently restrict their activities to one side of the adult/child divide --as the label "child psychologist" indicates.

The variable of culture is somewhat harder to define. Many discussions of this topic now make a general distinction between "mainstream" children and "minority" children. The criteria for inclusion in one or another category is somewhat arbitrary. And of course there are important subgroup differences within each of the categories. The Hispanic child is culturally different from the American Black child though both are called minority. But by the same token, the working-class second generation Irish American child in an urban school is culturally quite different from the upper-middle class WASP child in a private academy, though both would be labelled mainstream.

Despite the problems, however, I find the general distinction between "mainstream" children and "minority" children a necessary and useful distinction, at least in the context of contemporary American society. The question then arises. Are there such important functional differences between mainstream and minority children as to warrant separate instruments --or even special personnel-- in assessing either group? Recall: the adult/child dichotomy has produced specialized instruments and specialized examiners. Should not the minority/mainstream dichotomy follow the same course? I phrase the matter as a question. I realize that a radical dichotomizing may be practically and logically untenable. But by the same token is it valid to assume that the same assessment procedures can be mechanically applied to both groups? This latent assumption, which has underlain much testing, must be exposed and questioned, as is now occurring.

The same caution applies in an even stronger fashion when we move into the third variable, that of language. That large subgroup of minority children who in addition have as their native language some language other than English are in a particularly difficult educational situation, and are particularly difficult to assess in an unbiased fashion. When dealing with this dimension, there is no question but that heightened examiner sensitivity as well as very special testing arrangements are in order and that specially trained personnel are needed in the case of detailed diagnoses of children with limited English speaking ability.

Moving down briefly into the fourth variable, that of the assessment setting, it is imperative to make a distinction between psychoeducational assessment and clinical assessment. As I suggested earlier, psychologists in traditional clinical settings usually deal almost exclusively with personality and general cognitive functioning and may be rather unaware of the school culture. The individual working in educational settings should be more attuned to the teaching-learning process and to the culture of the school

Looking back, then, over the first four variables of the proposed diagram of the testing field, some useful suggestions emerge. The map helps us to specify precisely the type of activity in which we will be engaged: the psychoeducational assessment of non-English speaking minority children. This poses somewhat different problems from the assessment of English speaking minority children, such as American Blacks. And it is even more further removed from the clinical assessment of mainstream adults, to take an extreme example. Yet it is not unusual to find the assessment of Hispanic schoolchildren contracted out to agencies which do most of their work precisely in the clinical assessment of adults. The drawing of a scheme such as the one presented here will not eliminate such practices, but it will hopefully help to expose their absurdity.

Briefly going down the remaining four testing variables --objectives, strategy, scope, and frequency-- it is clear that we have a wide range of procedures to choose from. As I have indicated, I myself favor the diagnostic-prescriptive approach, over labeling and categorizing. I have furthermore preferred individual testing over group testing, though each has its place. I find comprehensive assessment of several domains much more helpful than a restricted analysis of, say, intelligence. And the one-shot contact is in my opinion much less valuable than a relationship in which the psychologist can have follow-up contact with the child.

But these are merely some general observations aimed at placing a particular testing interaction in its proper context and at signalling the need for finer discriminations and training than are currently provided. I will now single out one of the variables, the domain of language, and discuss my own experiences with the problems which this domain creates in the arena of psychoeducational assessment.

Language and Testing

The major source of error in the psychoeducational assessment of bilingual children stems, I am convinced, from the domain of language. Conventional formulations frequently refer to the "problems" which bilingual children have with language. My own experiences, however,

indicate that the problems frequently lie, not with linguistic deficiencies on the part of the children, but with linguistic naivete on the part of the examiners. I have come across about a half dozen potential sources of error and misinterpretation on the part of examiners, and I would like to discuss each at least briefly.

The Domain of Phonology

An important symptom of psychoeducational problems is a speech defect of one sort or another in the child. But it is quite easy to label as problemmatic a speech pattern that, though deviant from standard norms, is really a linguistic pattern rather than a product of cognitive malfunctioning of one sort or another. These misinterpretations can occur not only when the Spanish-speaking child is performing in English, but even when the assessment is being carried out in Spanish itself. I will begin by talking about the first variant, the one that occurs when the child is assessed in English.

The problem occurs most obviously on the level of phonology --the level of basic sound production. On the one hand there are English sounds which the Spanish speaking child may simply not be able to pronounce, because there are no analogues in his own language. Examples of this will be the "sh" in "shoo." The Spanish child may say "choo" no matter how many times "shoo" is repeated. Another prime example is the "ur" sound in "burn." The Spanish child, if hearing it, may say "bern." The American "r" is also difficult for Hispanics. There are other sounds that the Spanish child may be able to produce, but not in the contexts where English demands it. The voiced labiodental fricative, the sound of "v" in "very," is an example. There is a rough analog to this sound in Spanish --the bilabial spirant found in the Spanish work for grape (uva). But this sound never occurs at the beginning of a word in most varieties of spoken Spanish, and will be converted into a "b" instead. Thus many Hispanic children will insist on pronouncing the word "voice" as "boyce," no matter how many times they hear it, though they can do better on the word "heavy," since there the "v" occurs in the right place. Even the sound "s" is affected. Spanish does not permit words to begin with this sound plus

a consonant, but rather preposes an "e" sound. Thus the English word "steam" will be rendered as "esteam." The word "splashing" will come out as "esplaching."

It is obvious that these patterns are produced, not by speech defects, but rather by the phenomenom called "linguistic interference." The Hispanic child is quite capable of following linguistic rules; but he imposes the rules of his own language on English, in the same way that an English speaking child (or adult) learning Spanish will say "rap-uh-dow" instead of rápido, "kha-row" instead of carro.

However, there are deviations which signal deeper malfunctioning. The problem is in identifying which deviations are simply linguistic and which are symptomatic of deeper problems. Psychologists with limited command of Spanish may be at a genuine loss to distinguish between the two. Any deviation that is predictable from the normal patterns of the native language cannot be taken as symptomatic of underlying speech problems. A knowledge of basic Spanish phonology would be a highly recommended qualification on the part of any examiner who will be dealing with Hispanic children.

But I have found linguistic interference manifesting itself in the domain of reading and writing as well. Figure 2 gives some examples. If a Spanish child insists on writing the English word "say" as "sey", he is merely following good Spanish orthographic principles. If he sees the English word "bird," but reads "beard," he is merely pronouncing the letter "i" as it is pronounced in Spanish. The child may be a better reader or speller than he appears to be. And here, once again, only a knowledge of basic Spanish phonology will permit a person to perceive clearly and unhesitatingly what is occurring, to distinguish a bright child accurately applying his own language rules from a child with genuine problems.

See Figure 2 on page

Spanish Dialects

The above examples concerned patterns that can occur when the Hispanic child attempts to speak or write English. But I have seen

cases in which examiners have misinterpreted, or been in doubt about, the performance of the child in Spanish as well. There are numerous cases in which the child says something in Spanish in a manner that differs from a standard Spanish rendition. I have found some of these deviations to be clearly symptomatic of possible speech defects. However, others are mere products of Spanish dialectology, and reflect simple linguistic differences. It is important to be able to distinguish

Figure 2

Orthographic Interference, Linguistically Determined

Standard Spelling		Spelling by Hispanic Child
material	---------->	matirial
cut	---------->	cat
cook	---------->	cuk
wash	---------->	wach
must	---------->	mast
make	---------->	meke
fashion	---------->	facnon
reach	---------->	rich

between the two types of non-standard utterances.

Figure 3 gives examples of dialectically motivated phonological deviations that are in no way symptomatic of learning or speech defects.

See Figure 3 on page

I have classified them simply into substitutions, deletions, and additions or hypercorrections. Unaccented "e" will in some dialects come out sounding like "i", as in the case of the word después. In most Caribbean dialects, the letter "s" before most consonants or in word final position will not be pronounced as in standard Spanish. It is either turned into a glottal fricative, sounding like the English sound "h," or is simply dropped by many speakers. Thus the word "este" (this) can be rendered either as ejte or ete. But in

neither case does this represent an inability of the Hispanic child to pronounce "s". On the contrary, word initial "s" will be pronounced in the standard manner. The word for soup is always pronounced "sopa," never "jopa" or "opa." That is, the Caribbean child is merely following phonological rules. His apparent "dropping" of "s" in certain situations is indicative, not of linguistic problems, but of linguistic skill in following dialectical rules.

The same could be said of the treatment of the sound "r" by Caribbean Hispanics. "R" before many consonants or at the end of a word is rendered as an "l," or in the Cibao area of the Dominican Republic, as an "i". The word porque thus comes out as polque or poique. The word cocinar comes out as cocinal or cocinai. Once again, we are dealing with a dialectical phenomenom, not a speech difficulty.

Figure 3

Dialectically Motivated Phonological Deviations, not Symptomatic of Speech Difficulties

	Standard Spanish		Child's Rendition
SUBSTITUTIONS	después (after)	------->	dipué
	porque (because)	------->	polque, poique
	cocinar (cook)	------->	cocinai
	este (this)	------->	ejte, ete
DELETIONS	está (is)	------->	eta, tá
	para (for)	------->	pa
	todo (all)	------->	to
	pescado (fish)	------->	pecao
	para dónde	------->	paonde
ADDITIONS AND	ojo (eye)	------->	sojo
HYPERCORRECTIONS	oído (ear)	------->	soido
	careta (mask)	------->	caresta
	hoy mismo (today)	------>	hor mimo
	ratón (rat)	------->	rastón
	Jaime (James)	------->	Jarmes

If the "r" occurs before a vowel, it will be rendered as in standard Spanish as in mira, or cara.

I might briefly mention a phenomenom that occurs with Dominican children with great frequency: the phenomenom of hypercorrection. Children sometimes "overcompensate" for dropping their "s" by putting one in where it does not belong in Standard Spanish. Thus the word careta may come out as caresta; the word for rat may come out as rastón rather than ratón. Similarly, fearing that an "i"s before consonants back into "r." Hoy mismo thus may come out as hor mimo; the name Jaime may come out as Jarmes. These hypercorrect forms are linquistically motivated; adults say them with frequency as well. They are, in short, a matter of dialectology , not of speech problems.

These examples have been on the level of phonology; but they occur on the level of syntax as well. Figure 4 gives a number of examples. In Standard Spanish the subject is placed after the verb

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See Figure 4 on page

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in questions. But many Caribbean speakers keep the subject before the verb, especially if the subject is a personal pronoun: "¿Onde uté vive?" "¿Qué tú quiere?" The word "hay", meaning there is or there are, may be treated differently by different speakers. Dominicans may put an "ello" before the "hay." Likewise verb conjugations follow slightly different syntax with Dominican speakers, especially with first person plural forms ("we" or "us.") Salimos may come out as saigamo, jugábamos may come out as jugábano. Such dialectical differences must be recognized as such, and not confused with linguistic inadequacy.

Figure 4

Dialectically Motivated Syntactic Deviations, Not Symptomatic of Problems

Standard Spanish	Child's Rendition
¿Dónde vive usted? (Where do you live?)	¿Dónde uste vive? ¿Ónde que uté vive?
¿Qué quieres tú? (What do you want?)	¿Qué tú quieres?

Standard Spanish	Child's Rendition
Hay dos vacas. (There are two cows).	Hayn do vaca.
Hay muchos. (There are many).	Ello hay mucho.
Siempre salimos mal. (We always end up badly).	Siempre saigamo mai.
Jubábamos juntos. (We used to play together).	Jugábano junto.

However, let us not go to the opposite extreme and perform the reverse injustice of dismissing all deviations Hispanic children make as simple dialectical variations. In my work with children I have come across a number of phonological deviations that were in fact symptomatic, not of dialect, but of genuine language problems. I have listed some of these in Figure 5.

See Figure 5 on page

The sounds "r" and "l" may be omitted after consonants. I have heard tres come out as tes; negro as nego. There are systematic substitutions that have occurred as well. "S" has occasionally been replaced by "t" (e.g. ti/si; peto/peso). "M" may be rendered as "b" (e.g. bujer/mujer). Intervocalic "r" may be rendered as "l" (e.g. mile/mire). There are other deviations, as can be seen from the figure.

I must hasten to point out that these deviations are not random or haphazard. At least some of them appear to be rule bound. In the case of substitutions, it is noticeable that the place of articulation of the substituted sound is generally roughly the same as that of the correct sound; what has changed is the manner of articulation. Sibilants and nasals will be rendered as stops. The rules of some of the changes are less obvious.

But what is important is that these deviations are genuinely symptomatic of hearing or speech difficulties. Why? Beacuse they are not made in terms of the prevailing practices in the speech community. They are produced rather by the failure of the child to perceive or

Figure 5

Phonology: Deviations Possibly Symptomatic of Hearing or Speech Difficulties

	Standard Spanish		Child's Rendition
OMISSIONS	tres (three)	-------->	tes
	plato (dish)	-------->	pato
	azul (blue)	-------->	zul
	zapato (shoe)	-------->	apato
	círculo (circle)	-------->	circo
	escalera (ladder)	-------->	alera
SUBSTITUTIONS	sí (yes)	-------->	ti
	peso (dollar)	-------->	peto
	arriba (up)	-------->	asiba
	mujer (woman)	-------->	bujer
	mire (look)	-------->	mile
ADDITIONS	oreja (ear)	-------->	orveja
COMBINATIONS	bigote (moustache)	------->	nibote
POLISYLLABIC WORDS	diferente (different	--->	ilefente
	animal (animal	-------->	alimal

reproduce sounds as other members of the speech community do. Whereas such deviations would be harmless in the case of young children, when made by children who have passed the chronological age of seven or eights, such deviations can be taken as symptomatic of underlying problems.

It should be possible to specify with a high degree of precision which types of deviations are dialectical and which are symptomatic of deeper problems. I would add, by the way, that what is said of Caribbean Hispanics may not apply to Mexican-Americans whose Spanish differs in certain ways. But in any case I am convinced that the task of assessing the bilingual child is a task that can be realiably done only by people thoroughly familiar with both languages spoken by the child and able to distinguish a simple linguistic pattern from a psychodiagnostically relevant deviation.

Deceptively "good" accents

The above examples concerned phonological deviations which the child makes from standard Spanish, deviations which may trick unwary examiners into labeling the child as undercompetent. But in the case of very young children, I have seen the opposite occur as well. They unwittingly trick the examiner into believing they are more competent in English than they really are. Once again, it is the domain of phonology which is in question.

Linguists very appropriately distinguish between the sound system of a language and its vocabulary and syntactic system. These are functionally distinct systems, and bilingual individuals may be more skilled in one of these than the others. Children, we know, are very good imitators of sounds. In fact many Spanish-dominant children succeed in mastering the English sound system very rapidly. They may not know many English words, and their control of English grammar may be weak. But the few things which they succeed in saying, they may say without any trace of a foreign accent. The monolingual psychologist working solely in English may not even know the child is bilingual and Spanish-dominant. On occassions I have come across psychological reports on Hispanic children tested by monolingual psychologists. Nowhere in the reports is there any indication that the examiners have even been aware that the child's dominant language was Spanish. Because the children may speak with no foreign accent, they may be erroneously judged as "English speaking," even though their vocabulary and grammar in English may be very weak. The examiners in some cases do not even bother to discuss the remarkable differences which the children manifested between low verbal scores on the WISC and much higher performance scores, obviously symptomatic of linguistic and cultural variables, and would instead classify the children as "dull normal" or some other such label. Thus, linguistic naivete on the part of examiners may lead to interpretations damaging to the children involved.

I might add that Hispanic adults face that problem in reverse. Many immigrants who set their mind to it will master English vocabulary

and grammar and become in effect competent speakers of English. But being adults they may never master the English sound system as a young child could. Thus, though what they say may be grammatically correct and lexically sophisticated, they say it with a thick foreign accent, and may thus be dismissed as poor speakers of English, though in reality they may be quite competent. Sometimes even a child will be weaker in phonology than in grammar and syntax. Her poor accent may end up tilting a decision toward placing her in a bilingual program which she may not really want or need, even though in grammar and syntax she may be more competent than other children whose "good" accent causes them to be treated as English dominant. All of this simply illustrates the need for some degree of linguistic awareness and sophistication on the part of psychologists who work with bilingual individuals.

Diglossia

At a higher level, beyond the dimensions of phonology, morphology, and syntax, the linguistic problem is even more complex. It is theoretically possible to administer tests which permit us to come up with clear-cut scores that would place children in each of the five linguistic categories as defined by the Lau remedies (i.e. monolingual English, English dominant, bilingual, other language dominant, monolingual other language). But our task as diagnosticians would still not be completed.

The fact that a child may come out as genuinely "bilingual" on such measures does not in my experience guarantee that the child has as generalized a command of English as monolingual children do. Language, as it occurs in real life, is much more than getting 17 out of 20 questions right. There are much more subtle and hard to measure dimensions of linguistic comprehension and linguistic expressiveness, of the command and facility in understanding and in speaking. There is in addition the more subtle area of pragmatics, which deals more specifically with the "hows" and "whens" to say "what."

Of particular relevance is the phenomenom which linguists refer to as diglossia: the selective use of different languages for different types of situations. Thus an educated Haitian would use French in formal settings but switch to Creole in informal settings. The diglossia which Hispanic children manifest is somewhat analogous. The Hispanic child whose native language is Spanish but who has always gone to school in English is in somewhat of a bind. In informal settings and in "real life" he is more fluent in Spanish. But because of his English schooling, he may have come to feel genuinely more comfortable using English for structured learning activities. So I can be chatting with a child and holding long informal conversations in Spanish, but when I start probing into concepts of math or science, that very child may plead with me in Spanish to switch into English: "Pregúntamelo en inglés" is a request that I have received many times. Because of schooling, children may be genuinely more at ease solving certain types of problems in English, even though their native and dominant tongue is Spanish.

I myself have suffered from this diglossia, as do many Hispanic professionals trained in the United States, or other English speaking country. My dominant language is Spanish; but most of my psychology has been studied in English. When I began teaching psychology to college students in the Dominican Republic, at first I simply lacked the vocabulary. Though in most non-schooling domains I am much more comfortable in Spanish than in English, for certain specific academic tasks, I am at first more comfortable in English. This is precisely what may happen to Spanish-dominant children after a few years in an English-speaking school.

However, I wish to hasten to point out that this preference expressed by the child for English is not necessarily an indication of his thorough proficiency in English. And here my own clinical data indicates how children's functioning is hampered by their lack of thorough proficiency in English. To use a simplistic example, a child may be perfectly able to solve a mathematical problem presented thus, "2 + 2 = __," but may deal much less adequately with the same problem when it is embedded in language (i.e. Mary had two kittens and her mother gave her two more...etc), thus reflecting the subtle effects language may have on a child's academic functioning.

This frequently presents the psychologists with a dilemma. If it turns out that the child is Spanish dominant in oral language and that at the same time the child's reading and writing skills are more developed in Spanish, then a bilingual curriculum may be very desirable. However, if on the contrary it turns out that the child is Spanish dominant in speaking, but neither reads nor writes in Spanish and is instead more comfortable in English in these skills --even if these skills are limited-- I am not at all sure that the proper course of action is to force him to "start from scratch" by placing him in a beginning bilingual program. In some cases it might be more appropriate to give more intensive English-language training and specific attention to English reading skills. My own clinical experiences make me hesitant to mechanically prescribe inclusion in bilingual programs as a panacea for all cases. Final decisions should be made on the basis of many considerations. The more one realizes about language complexity, the less clearcut do solutions become.

But linguistic awareness is in any case a prerequisite for intelligent decisions. The assessment and placing of bilingual or multilingual children with special needs is thus viewed by some as being beyond the competence of monolingual psychologists, and my own experiences with cases of obvious misplacement make me at least generally sympathetic with that view. But what seems to be most important is that we do not take the matter half-heartedly and that decisions for inclusion or exclusion be planned and well documented so as to avoid shunting children from regular to bilingual to regular programs, as many of us have witnessed so frequently in the past.

Nilingualism

In terminating this discussion on language, I would like to address some remarks briefly to the question of what has been called nilingualism. Many Caribbean Hispanic children are said to be so confused that they speak no language correctly, neither English nor Spanish.

Such statements are generally founded on the linguistic naivete of the judge. The phonology of Caribbean Spanish differs from Iberian or even South American Spanish --but it is still Spanish. The vocabulary

of migrants incorporates many English words that are given Spanish endings, e.g. rufo for roof, mapo for mop, the same process that happens any time two languages come into contact. But the bulk of the vocabulary is still Spanish. And the grammar of the language is fully Spanish.

There is of course linguistic interference, language bifurcation, and a tendency to code switch may also be characteristic in some individuals; there are also some children with diminished language facility, or who are experiencing such confusion that a monolingual English or monolingual Spanish curriculum seems more indicated than a bilingual one. Yet, to claim that nilingualism is widespread is an unwarranted assertion, or at best an oversimplification, another one of those labels that offers no specifics and no solutions.

Culture-Free Tests?

Linguistic differences can undermine the validity even of tests that are supposedly freer of language bias. Tests in which children are asked to draw different objects are frequently presented as effective ways of getting around language barriers. In my own work, however, I have found that this is simply not true. It will be helpful to give some examples of the manner in which language permeates even the task of drawing, leading to possibly false psychodiagnostic conclusions on the part of naive examiners.

One very commonly used drawing test is the House-Tree-Person technique. It would seem to be an easy matter to elicit the required drawings from Hispanic children by simply translating the words and formulating the instructions in Spanish. Such is not, however, the case.

Take the word tree, for example. The objective of the test is to have the children draw a typical tree, without specifying what type of tree. Mirta is a 10 year old Spanish speaking girl. The standard translation of the word "tree" is árbol, so I said to Mirta: "Dibújame un árbol." Figure 6 is the drawing which she produced.

See Figure 6 on page

Figure 6

Girl C.A. 10-0

It takes little imagination to see that she produced a Christmas tree. Figure 7 is the drawing which Pablo, an 11 year old boy, produced, when I requested of him: "dibújame un árbol."

See Figure 7 on page

It is very rare for an English speaking child to produce a potted Christmas tree in this test. Yet the Hispanic child from the Caribbean when asked to draw an árbol, will almost invariably draw a potted Christmas tree. Can we draw any psychodynamic interpretation of these differences? Are Hispanic children more oriented perhaps toward immediate need gratification?

Before turning heavy on psychodynamics, however, it would be much safer to begin with simple linguistics. Despite what the dictionary says, Caribbean Hispanics use the word árbol only to refer to American style decorated and potted Christmas trees. When they talk about regular outdoor trees, they do not use the word árbol, but rather the word mata or the word palo. The differences in the drawings of Anglos and Hispanics in this case are purely linguistic, not at all psychological, and it would be ludicrous to attach psychodynamic interpretations to this simple linguistic pattern.

So why not then use the word that corresponds to the English word "tree" in the vocabulary of Caribbean Hispanics? Unfortunately languages do not always cooperate by having such neat equivalents. I tried on several occassions using the word mata. The problem is that mata by itself generally means simply "plant". It is only in combination with some other word --a fruit, for example- that mata has the meaning of "tree." Thus a mata de coco is a coconut tree; a mata de guineo is a banana tree, and so on. But the test calls for simply eliciting a tree, without specifying what kind of tree. I have tried this on several occasions, asking the child to draw simply a mata, without specifying, hoping I would get a tree. Figure 8 shows what happens. The figure on the left was the drawing which mata elicited:

Figure 7

Boy
C.A. = 10-10

See Figure 8 on page

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a tiny plant. Somehwat frustrated I then tried árbol --and received the drawing on the right, a Christmas tree. I then tried the same with another child. Figure 9 shows the results of the identical:

See Figure 9 on page

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a plant for mata, a Christmas tree for árbol. There is simply no generic term in most Caribbean dialects which corresponds exactly to the English word "tree." I finally hit on a solution. I asked a ten year old girl: "dibújame un tree." Figure 10 shows the results:

See Figure 10 on page

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a typical American tree with no pot and no ornaments. The psychodynamic interpretations which can so easily be made are exposed here as extremely questionalbe. The differences in drawings between Hispanics and Anglos are more a matter of language than of psyche. Even an apparently culture-free test can be misinterpreted if placed in the hands of a linguistically or culturally naive examiner.

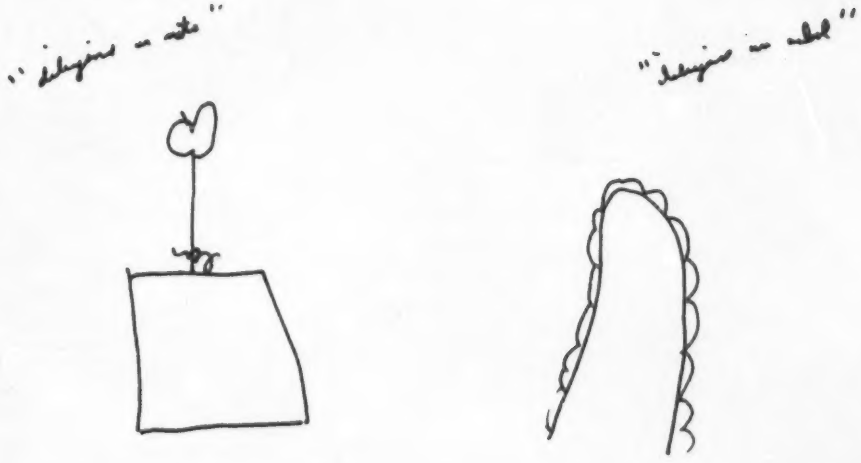
I see this now in retrospect. But I first began using this test on Hispanic children in my early years of graduate school and I dutifully used the dictionary word árbol to translate the word tree rather than following my linguistic instinct to use the word mata or palo. When I received a potted Christmas tree from the child I asked about its meaning in class. The people I consulted with saw the potted tree as an expression of need for outer controls on the part of the child, as an indication of the child's fears as to where his own unrestrained impulses and affect would lead him if control and structure were not imposed from without. All of this because the tree was in a pot. My supervisors, of course, were not entirely to blame, since the Anglo child who draws a tree in a pot is probably revealing something about himself. But in the case of Caribbean Hispanic who grows up calling Christmas trees árboles, the

Figure 8

Boy

C.A. = 9-3

Figure 9



Boy

C.A. = 6-7

Figure 10

Girl
C.A. = 10-0

107

presence of the pot is a sensible reaction to the fact that without one your Christmas tree will topple over onto the living room floor.

There are other similar examples as well. Another commonly used drawing test is the Draw-a-Family. Most Anglo children will draw mother, father, and maybe two or three children -- the typical Western nuclear family. Luis, a 9 1/2 year old Spanish dominant boy just up from Puerto Rico, however, produced the drawing we see on Figure 11.

See Figure 11 on page

Another child produced a similar drawing, which we see on Figure 12.

See Figure 12 on page

Both of these drawings, of course, represent the extended family composed of aunts, uncles, cousins, and the like. Does such a phenomenom mean that the Hispanic child has a sense of a wider network of kin than does the Anglo child? That perhaps may be true. But I suspect it is more linguistic than cultural. The term familia in the Caribbean refers to a concept that would best be rendered in English as "those who are related to you." Despite sterotypes, most Hispanic children do not live in the same house with cousins, uncles, aunts, or the like. If they draw them into the "familia," it is because of the linguistic meaning of the term familia rather than their actual residential situation. I believe even here we have a language difference between two groups, rather than a psychic or even cultural one, though the cultural element also plays a role.

Frequently, however, the Hispanic child will produce drawings of nuclear families, since the word familia can also be interpreted in this sense as well. Figure 13 was elicited from a 12 year old boy.

Figure 11

106

109

110

Boy
C.A. =9-7

Figure 12

Girl

C.A. = 10-1

Figure 13

Boy
C.A. = 12-4

See Figure 13 on page

It depicts what is a "typical" nuclear family, except for the fact that four children would be more than in most Anglo households. It is tempting to interpret the inflated belly of the mother (second from left) as stemming from pregnancy. This particular woman, however, was suffering from --and had recently been hospitalized for-- an illness in which her belly was swollen. Once again, it is crucial to examine certain types of factual data before launching into psychodynamic interpretations of drawings. Figure 14 shows another familia. The

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See Figure 14 on page

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father is missing from this household and of course does not appear in the drawing. The artist was a 10 1/2 year old boy who drew himself on the far right. It is noticeable that, being the "man" of the house, he drew himself as roughly the same size as his mother on the far left.

I will give another example, the case of house. There is a tendency to speak about the Hispanics as though they were a culturally homogeneous group. In reality, however, the Hispanic community is composed of individuals at different degrees of acculturation into continental, urban life. The drawings of houses appear to reflect this trajectory to some degree.

Figure 15 shows the house which a Spanish dominant child just up

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See Figure 15 on page

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from Puerto Rico drew. It is in reality a one story house, the windows being drawn higher than the doors. The structure to the right of the house is not a chimney, but may be the type of separate kitchen that is generally found in the Caribbean, though I neglected to question the

Figure 14

Boy
C.A. = 10-5

Figure 15

Boy
C.A. = 9-5

Figure 16

Boy
C.A. = 12-4

child. The tree on the left is a mango tree, the tree on the right is a coconut tree. The content and spaciousness of the house, in short, reflect the tropical environment from which the child had just come.

Figure 16 was drawn by a child who was born in the island but had

See Figure 16 on page

spent over half his life on the U.S. mainland. Notice in this drawing: the trees are gone, there is a chimney, and there are curtains on most of the windows. Most important however is the change in the door. The first house had three doors, one of them open. This house in contrast has only one door, and it has the thief-proof peephole that urban children have become so used to. This child is obviously at a further stage of assimilation to urban U.S. life.

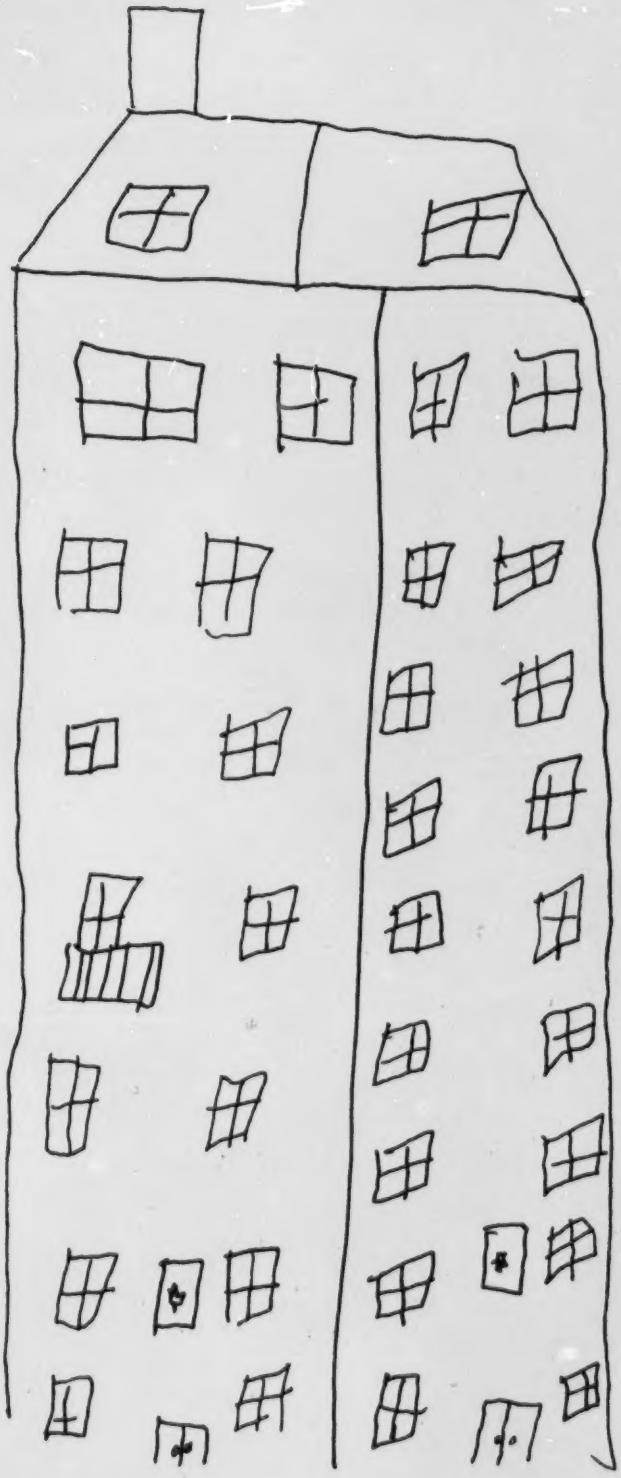
But I also elicited a drawing from a Hispanic child who had been born and raised in New York City, and who had never been to his parents' homeland. When asked to draw a house, he produced the drawing in Figure 17.

See Figure 17 on page

In addition to several doors with peepholes, this apartment building has at least seven storeys and a structure which the child described as an elevator.

It is clear that the differences between these three drawings must be interpreted first and foremost as reflections of objective differences in the external environments of the three children, rather than as symptoms of simple psychic differences. These latter may exist, but in interpreting the differences in drawings, it is much safer to exhaust differences in the life experiences of the children as explanatory constructs before moving into hypotheses of psychic differences of any sort.

Figure 17



Boy
C.A. = 11-3

Am I saying that drawings then have no psychodiagnostic potential with Hispanic children? That they are simply products of linguistic and external life experiences? No I am not. Just as non standard linguistic deviations may be dialectically motivated, but may also be psychologically motivated, depending on the type of deviation, so also some drawings may reflect external aspects of the child's life, whereas other drawings do in fact give us a glimpse of certain aspects of the inner life of the child.

That is, drawings are a very good way of getting at children's functioning, though they should be used with reservations. I found drawings in effect to be highly subjected to the influence of envioronmental factors and of the ability to handle paper and pencil, in my experience with village children in Haiti who had had little or no schooling. Their human figures--though rich in details-- were characterized by very poor integration, and their performance on tests such as the Bender could be erroneously interpreted as indicating serious perceptual-motor integration dysfunction unless the examiner were aware that these children had never held paper and pencil. But when using safeguards I find instruments such as the Bender and figure drawings very rich clinical instruments, despite their shortcomings.

Let me sum up and conclude this section on drawings. Contrary to the belief of some, even drawings are not culture-free instruments which take us directly into the cognitive and affective functioning of a child. On the contrary, I have argued that the content of drawings is heavily influenced by the linguistic stimuli evoking the drawings, by the external life situation in which individuals find themselves, and by the general familiarity of children in manipulating pencil and paper. I have tried to show the impossibility of a reliable interpretation of drawings without familiarity with these aspects of the child. There are as yet no hard and fast rules which I can formulate which will permit reliable decisions as to when a psychodynamic interpretation is warranted, or when, on the contrary, a simpler explanation would be more in order. But one thing does seem clear: an examiner who is sensitive and familiar with the language and culture of the child and who is simultaneously endowed with

some common sense and a sense of humor is less likely to go off into profound, pejorative interpretations. In this sense the call for psychologists who are sensitive and cognizant of the culture should not be dismissed as a form of ethnic chauvinism; it is rather a task-related, technical safeguard against erroneous, pejorative, occasionally absurd, and possibly damaging interpretations of tests.

Conclusion

While at the level of the microcosm of the immediate testing situation, the best immediate course of action may be the use of some carefully selected conventional instruments buttressed by newer safeguards, at the level of the macrocosm, it is imperative that we make use of the historical momentum for change that has been set in motion, and that we focus on the research and development of alternatives for the assessment of children's psychoeducational functioning. It is furthermore imperative that we make it a priority to become familiar with the alternatives already in existence. And finally it is absolutely crucial that the complexities of language be acknowledged and that psychologists who work with bilingual students have at the minimum some degree of linguistic awareness and sophistication, and if at all possible some actual command of the native language spoken by the children.

ADOBE RADIATION

DR. ELOY R. GONZALES
UNIVERSITY OF NEW MEXICO

I have been involved with the problem of testing, particularly in the area of testing minority, culturally different children, for the past seven years in the state of New Mexico. In most school districts, the pressing problem of the disproportionate number of minority children in Special Education was constantly arising. Many events have taken place in New Mexico to eleviate this problem of which the certification of educational diagnosticians, has been the most crucial of these events.

Up to one year ago in our State, any individual who owned a WISC kit or would be hired by a particular school district, could test, label, and place children in special education. Since this time, certification of educational diagnosticians has taken place. This has been a long and drawn out process with a lot of resentment and disagreement as to what this individual should be and what his particular duties should be.

The handout which you have will give you an idea of what our State and our requirements for educational diagnosticians. General requirements call for: (1) a Masters degree in Educational Diagnosis, Special Education, Guidance and Counseling, Educational Psychology, School Psychology, or other approved fields desirable. (2) A minimum of two years teaching or equivalent experience with exceptional children. (3) A New Mexico Certification in Special Education or Guidance and Counseling.

One second area which we had some disputes on, were course requirements and this is what we came up with. At least 30 semester hours including a minimum of one course in each of the following listed areas: (These are the areas)

1. Survey or characteristics of exceptional children. (We are looking for the survey of exceptional children course - the basic introduction to Special Education).
2. Test and Measurements
3. Statistics
4. Individual Measurements, including supervised practicum in

120

individual test of intelligence course, Educational Diagnosis, and Skills and Testing Culturally and Linguistically different children. This is the course which I developed at the University and have now taught it for the past three years.

5. Human Growth and Development
6. Theories of Learning
7. Methods and Materials for Teaching Exceptional Children - This course would enable the individual to not only come up with test scores and results, but also make recommendations as to possible methods of teaching the child and materials to be used.
8. Diagnosis and Remediation of Reading Problems
9. Factors in Multicultural Education

And finally, the requirement that the individual must show 240 clock hours of supervised internship or field experience.

Although the concept of an educational diagnostician is not widely accepted in many states, we feel we now have the answers to many of our problems, particularly answers that classroom teachers themselves have asked. We have experienced school psychologists who are excellent testers, counselors who are excellent testers, and can give you test results and scores. Rarely will they come out with recommendations as far as materials or actual methods to use with this children. That is what we were looking for when we began developing the design for this individual. We now at the University of New Mexico have a competency based program for the educational diagnostician.

The need for qualified and certified educational diagnosticians is only one of few problems faced by the field in dealing with culturally and linguistically different children. It is nothing new to see this disproportionate number of minority children in Special Education. The reason for these numbers is,of course, the main concern. Numberous attempts to answer or come up with rationale for these results have been given. We must look at it from either a genetics point of view such as Jensen or Shockley who come out and say that minorities are genetically inferior and consquently whatever program of remmediation we come up with,

they will be of little value. On the other hand, environmentalists contend that if the environment and the variables affecting the child's environment were changed, changes would take place academically and intellectually as far as what tests measure with minorities.

In my own personal search for answers for this disproportionate number, I have travelled throughout northern New Mexico, which has a large percentage of Mexican-American, and I likewise found this disproportionate number in classes for the mentally retarded. In a search for variables, such as those presented by Mercer, those being education of the family, parent expectations, and so on, I have likewise not been able to identify specific variables, although I did come up with one variable that seemed to be consistent with a majority of Mexican-Americans in northern New Mexico. This variable is that the majority of these children appear to come from homes made of adobe. I, therefore, concluded that they must be suffering from adobe radiation. I know many of you are sitting there not knowing whether to believe this. Some of you smiling, others looking around for support and I will likewise receive many questions - questioning my true belief on this matter. And my only response is that this theory is as good as any other that we have now.

Environment has of course, appeared to have the most significant effect on academics when dealing with minorities. In this area, Dr. Jane Mercer's recent work has demonstrated its effect.

Mercer's work was conducted in Riverside, California, with populations of Chicano's and Blacks. She attempted to control the variables of environments to see exactly what part, if any, the environment played. Her first attempt was to isolate the variables which appear to affect the child's performance. These were, of course, numerous and finally cut down to five which she felt were most significant. The five were: - (1) Parent expectation, (2) The language spoken in the home, (3) Number of siblings in the family, (4) Job held by the head of the household, and (5) Whether the family owned or rented their own home.

She then proceeded with both ethnic groups, to award each child one point for each of the variables that were found to be positive in that

child's environment. She termed these variables positive, modal characteristics. On the chart then, (See attachment) you will notice the first series of natural curves, shows the black child mean IQ for the group, which is 90.5. In the second group of curves, you will see the mean IQ score for a child of zero or one positive modal characteristic. That IQ being 82.7. In the third set of curves, a child with two positives modal characteristics, mean IQ - 87. The fourth series, a child with three positive modal characteristics, mean IQ of 92.8. The fifth series, a child with all four modal characteristics, mean IQ of 95.5, and finally a black child with all five positive modal characteristics between 90 - 90.9 or approximately the average IQ nationwide.

The second transparency that you will see is the Chicano child and again basically we see the same results. Mean IQ as a group, 90.4. Zero one modal characteristic, 84.5, with two modal characteristics, 88.1, with three modal characteristics, 89.0, with four modal characteristics, 95.5, and finally with all five positive modal characteristics, 104.4.

We are next going to look at the assessment and evaluation model for a non-discriminatory testing, which I have developed at the University of New Mexico. (See attachment) You have copies of them, and if you will follow with me, we will go through the five phases which are: (1) the referral phase, (2) the preevaluation data phase, (3) identification of instrument and evaluator phase, (4) appraisal and review committee decision, and (5) that of programming the child.

What I will attempt to do in addition to simply going over these phases, is to present to you Public Law 94-142 and how these law affects these five phases. (See attachment) Again, you have a handout which I have gathered and withdrawn these sections from the Public Law and have additionally added other civil rights memorandum and mandates dealing with these areas of evaluation testing.

After reviewing Public Law 94-142 and other mandates dealing with this area, many of you perhaps feel threatened and hopefully so. One of the main goals of this presentation is to familarize you with the laws involved and in some cases the results if these laws are not adhered to. It is quite sad to know that although many changes have taken place with children, especially for exceptional children, that it did not take place because of well intentioned and concerned administrators and teachers, but came about because of pressures from the courts, concerned parents and other groups dealing with the education of children.

The next handout that I am presenting you, is a list of the key litigations dealing with the education, testing, and placement of minority children. (See attachement) I have taken these key issues with samples dealing with placements of Black children, Mexican-American and Indian children. We will go through these one at a time and review them so that you can get an idea of what exactly is involved in a litigation. You can clearly see what the basis are for some of these suits as well as results.

Throughout this presentation at this point, many of you have been asking if we in New Mexico have been doing anything different or are presently working on any tests that might be used with culturally and linguistically different children in your area. I am presenting a handout of some of the work that is going on right now in our university dealing with the LEITER International Performance Scale. We have been using this test for some time in our State, primarily because it is without doubt the most effective of the intelligence test, allowing you to eliminate the variable of language. The LEITER is currently the most popular test used with the deaf and recently has become more and more popular in this area of the linguistically different child.

What we have attempted to do with the LEITER is to use it in addition to coming up with an IQ test as a diagnostic instrument as well. The first task involved was to examine each sub-test on the LEITER to find out specifically what each sub-test measures. In the past the only

information we have derived from the LEITER is a simple IQ score, which in many cases is worthless. So the handouts that you have in front of you now is a breakdown of each sub-test which enables you to break down, to plot and come up with possible difficiencies that the child might possess. I do not have the time to go into details, but if you are familiar with the LEITER, I do not believe you would have too much trouble interperting results and utilizing this information for your own benefit.

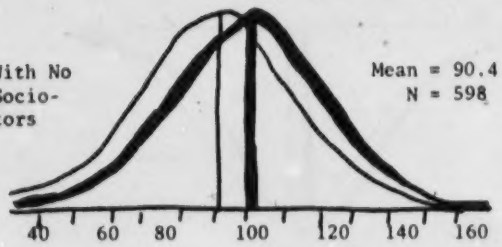
Another area that I am currently working with, is that of examining the Draw-A-Person test in order to determine if there are cultural differences in the drawings of children. In the Southwest, I am, therefore, looking at the children drawing of Mexican-American, Navajo, Pueblo, Black, and White-Anglo population. As I had suspected, there were some differences and in some cases significant difference between New Mexican-American population and the norm population used by Dr. Koppitz in her standarization of expected items on the Draw-A-Person. I will show you the first results. As I said, this is still in progress of what I found with Mexican-American children.

As you notice in many of these areas, Mexican-American children are scoring better and in many cases significantly better on expected items. In others they are lower. I hope to establish norms for our own population in the Southwest and stop comparing our own culturally rich children to those of the East and Midwest where many of these tests come from.

Covergence of the Average IQ Test Scores of Chicano Children with the Standard Norms as Sociocultural Factors are Increasingly Controlled

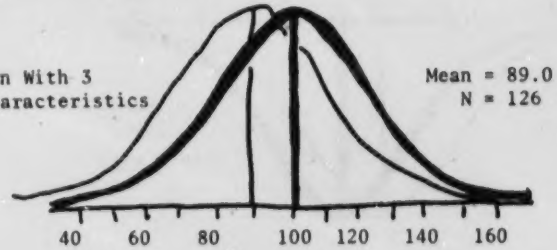
Distribution With No Control for Socio-cultural Factors

Mean = 90.4
N = 598



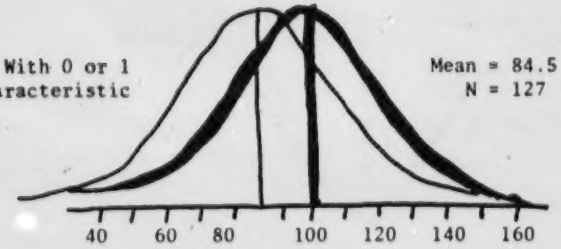
Children With 3 Modal Characteristics

Mean = 89.0
N = 126



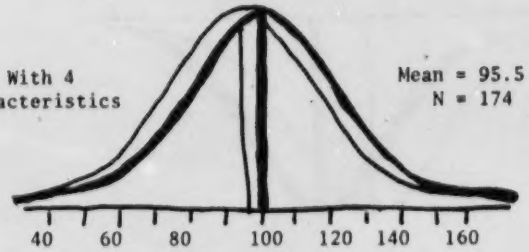
Children With 0 or 1 Modal Characteristic

Mean = 84.5
N = 127



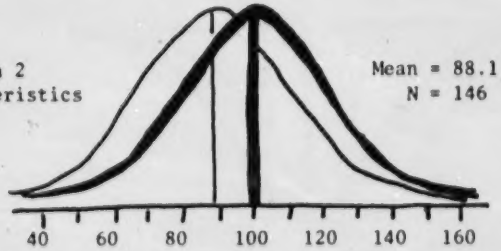
Children With 4 Modal Characteristics

Mean = 95.5
N = 174



Children with 2 Modal Characteristics

Mean = 88.1
N = 146



Children With 5 Modal Characteristics

Mean = 104.4
N = 25

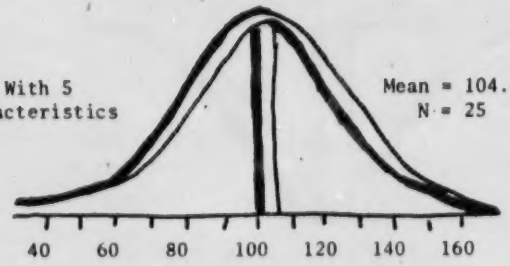
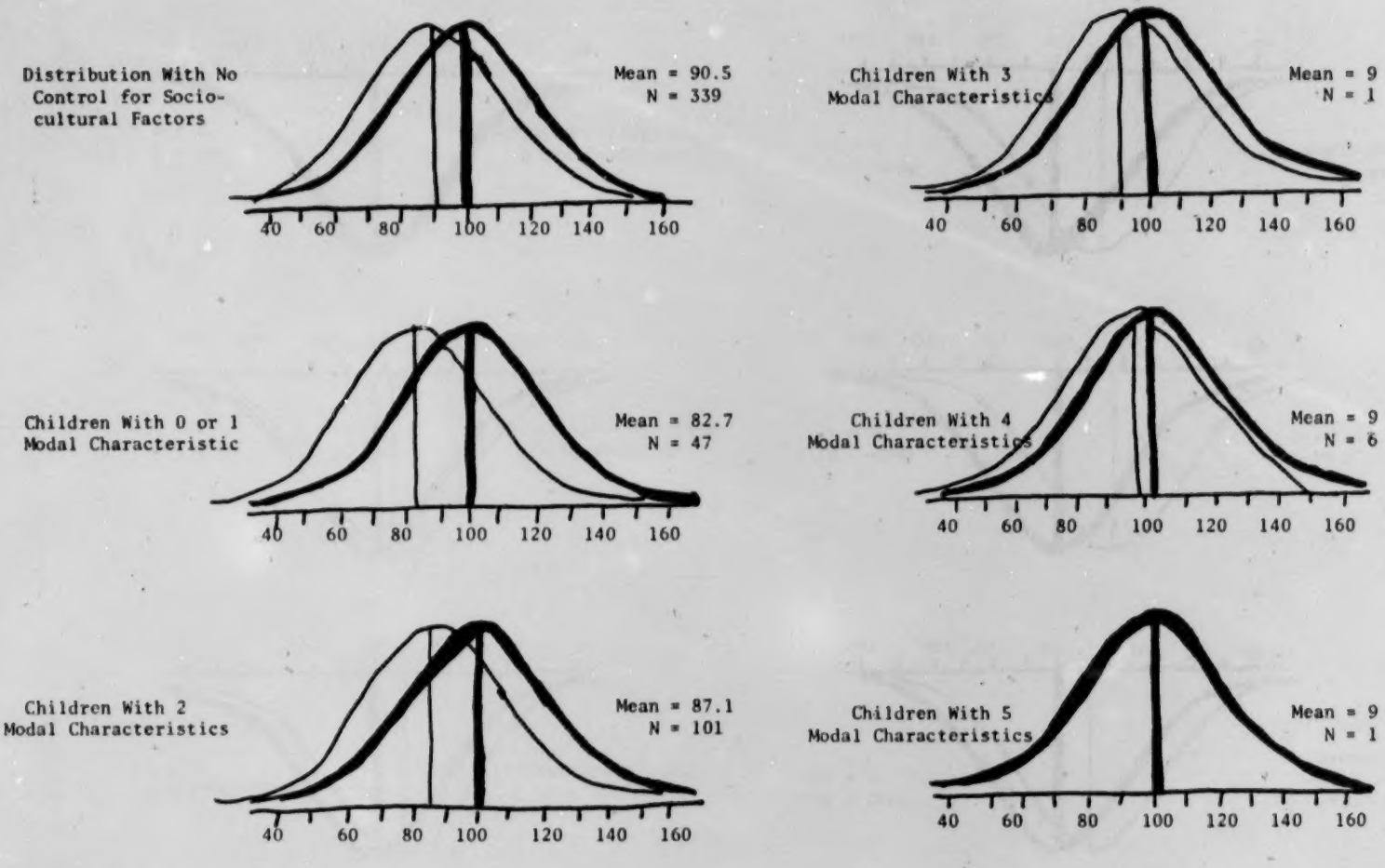


Figure 2

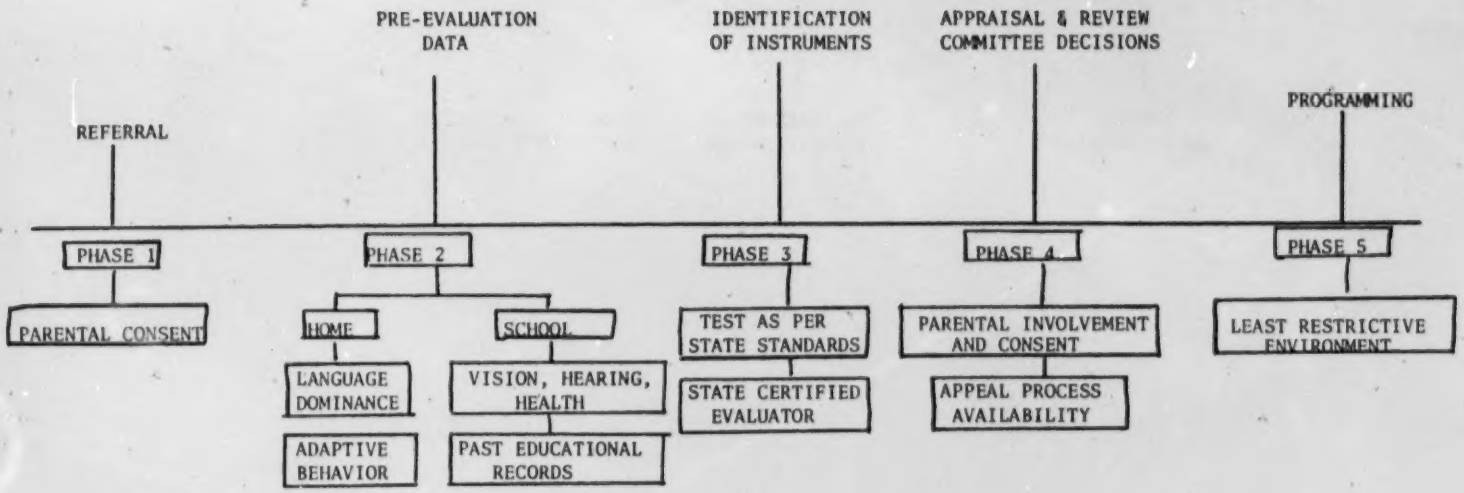
Coverage of the Average IQ Test Scores of Black Children with the Standard Norms as Sociocultural Factors are Increasingly Controlled


Distribution With No Control for Socio-cultural Factors
Mean = 90.5
N = 339
Children With 3 Modal Characteristics
Mean = 9
N = 1
Children With 0 or 1 Modal Characteristic
Mean = 82.7
N = 47
Children With 4 Modal Characteristics
Mean = 9
N = 6
Children With 2 Modal Characteristics
Mean = 87.1
N = 101
Children With 5 Modal Characteristics
Mean = 9
N = 1
40 60 80 100 120 140 160

ASSESSMENT & EVALUATION MODEL

NON-DISCRIMINATORY TESTING

Dr. Eloy R. Gonzales
Dept. of Spec. Ed.
University of New Mexico



CRITERIA FOR THE ISSUANCE OF AN
INTERIM LETTER OF AUTHORIZATION
FOR PRACTICING EDUCATIONAL DIAGNOSTICIANS

General Requirements

1. A Master's degree in Educational Diagnosis, Special Education, Guidance and Counseling, Educational Psychology, School Psychology, or other approved fields desirable. However, applicants who lack the Master's may be evaluated on the basis of course work completed.
2. Two years teaching or equivalent experience with exceptional children. Equivalent experience must be evaluated and approved by the State Department of Education.
3. New Mexico Certification in Special Education or Guidance and Counseling.

Specific Course Requirements

At least 30 semester (or 45 quarter) credit hours, including a minimum of one course in each of the following listed areas:

1. Survey/Characteristics of Exceptional Children
2. Tests and Measurements
3. Statistics
4. Individual Measurement (including supervised practicum) in:
   A. Intelligence
   B. Process functions, educational diagnosis, personality, etc.
   C. Skills in testing culturally/linguistically different children.
5. Human Growth and Development
6. Theories of Learning
7. Methods and Materials for Teaching Exceptional Children
8. Diagnosis and Remediation of Reading Problems
9. Factors in Multi-Cultural Education

PHASE I REFERRAL

May 25th Memorandum Office of Civil Rights

Before any student may be referred or recommended by a teacher or other school official for testing and evaluation, the teacher must observe the student's behavior in his family environment, in addition to observing school behavior and assessing academic performance. If the teacher on the basis of the foregoing review still believes it appropriate to review the student for testing, the teacher must prepare a written report summarizing observations of the student's behavior in the family environment, which must accompany any referral or recommendation for testing. In the case of a referral or recommendation from other persons, the teacher must communicate in writing to the appropriate school official a similar report, based on her observations of the behavior and environment of the child.

Public Law 94-14]

121 a. 404 Prior notice; parent consent.

(a) Written notice which meets the requiremtns under 121a.405 must be given to the parents of a handicapped child a reasonable time before the State or local educational agency:

(1) Proposes to initiate or change the identification, evaluation or educational placement of the child or the free appropriate public education provided to the child or

(2) Refuses to initiate or change the identification, evaulation, or educational placement of the child or the free appropriate public education provided to the child.

(b) Parental consent must be obtained before an evaluation is conducted.

121a.405 Co tent of notice

(a) The notice under 121a404 must include:

(1) A full explanation of all of the procedural safeguards available to the parents under Subpart E:

(2) A description of the action proposed or refused by the agency, an explanation of why the agency proposes or refuses to take the action, and a description of any options the agency considered and the reasons who those options were rejected.

(3) A description of each evaluation procedure, test, record, or report the agency uses as a basis for the proposal or refusal; and

(4) A description of any other factors which are relevant to the agency's proposal or refusal.

(b) The notice must be:

(1) Written in language understandable to the general public and

(2) Provided in the native language of the parent or other mode of communication used by the parent, unless it is clearly not feasible to do so.

(c) If the native language or other mode of communication of the parent is not a written language, the State or local educational agency shall take steps to insure:

(1) That the notice is translated orally or by other means to the parent in his or her native language or other mode of communication:

(2) That the parent understands the content of the notice, and

(3) That there is written evidence that the requirements in paragraph (c) (1) and (2) of this section have been met.

121a.406 Impartial due process hearing.

(a) A parent or a local educational agency may initiate a hearing on any of the matters described in 121a.404.

P.L. 93-380

Adaptive behavior is the effectiveness or degree with which the individual meets the standards of personal independence and social responsibility expected of her or his age and cultural group.

May 25th Memorandum Office of Civil Rights

Before the Advisory Committee can give full consideration to a proposed assignment, information including a medical report, psychometric indicators, sociocultural background information and adaptive behavior data must be gathered and carefully reviewed by the committee. The sociocultural information gathered should include a detailed description of the student's neighborhood and home living conditions, the age of siblings, the economic and educational expectations of the parents for the students and the predominant culture and language of the home environment. All information should be included in the interpretation of test results.

Before beginning the final interpretation and evaluation process, the test administrator must be provided with the results of thorough medical examination of the students visual, auditory, vocal and motor systems. The medical report must also be submitted to the Committee.

P.L. 94-142

121a.432 Evaluation Procedures

(e) Information from sources other than ability or achievement tests, including information concerning physical condition. Sociocultural background, and adaptive behavior in home and school, is gathered and considered and the weight given to each of these sources is documented:

PHASE III IDENTIFICATION OF INSTRUMENTS

Public Law 94-142

121a.432 Evaluation Procedures.

State and local educational agencies shall insure, at a minimum, that:

(a) Tests and other evaluation materials:

(1) Are provided and administered in the child's native language or other mode of communication, unless it is clearly not feasible to do so:

(2) Have been validated for the specific purpose for which they are used.

(3) Are recommended by their producer for the specific purpose for which they are used

(4) Are administered by personnel who meet applicable certification or licensure requirements under State law;

(b) No one test or type of test or other means of evaluation is used as the sole criterion for placement.

May 25th Memorandum, Office of Civil Rights

Before the student is given an individually administered IQ test, or other psychometric indicator, the student must be familiarized with the testing environment. In all cases a working rapport between the student to be tested and the test administrator must be established and when appropriate, the student should be afforded specific practice with the general demand-response behavior pattern. Accordingly, the school district must utilize test administrators who possess language skills and sufficient awarness of cultural differences to permit such administrators to effectively communicate instructions to and understand the responses, verbal and non-verbal, with the student to be tested.

P.L. 93-380

Where present testing and evaluation materials and procedures have an adverse impact on members of a particular race, national origin, or sex, additional or substitute materials and procedures which do not have such an adverse impact must be employed before placing such children in a special education program.

P.L. 94-142

121a.224 Parent Participation

(a) Each local educational agency shall take steps to insure that one or both of the parents of the handicapped child are present at each meeting or are afforded the opportunity to participate, including scheduling the meeting at a mutually agreed on time and place.

121a.402 Opportunity to examine records.

The parents of a handicapped child shall be afforded in accordance with the procedures in 121a.452-121a.459 an opportunity to examine all relevant records with respect to:

(a) The identification, evaluation and education placement of the child and

(b) The provision of a free appropriate public education to the child.

121a.403 Independent Educational Evaluation.

(a) General (1) The local educational agency shall inform the parents of a handicapped child that they have a right to obtain an independent educational evaluation of the child, subject to paragraphs (b) through (e) of this section.

(2) For the purposes of this section, "independent educational evaluation" means an evaluation conducted by a fully certified or licensed professional examiner who is not employed by and does not routinely provide evaluations for, the State or local educational agency responsible for the education of the child in question.

(b) Parents have the right to an independent educational evaluation at public expense if the parent disagrees with an evaluation obtained by the local educational agency. However, the local educational agency may initiate a hearing under 121a.406 of this subpart to show that its evaluation is appropriate.

121a.406 Impartial due process hearing.

(a) A parent or a local educational agency may initiate a hearing on any of the matters described in 121a.404.

(b) The hearing must be conducted by the State or local educational agency, as determined under State statute, State regulation, or a written policy of the State educational agency.

Committee Review of Proposed Assignment. The advisory committee must separately review the information regarding the student developed by (1) psychometric indicators interpreted with medical and social cultural background data, and the teacher's report and (2) adaptive behavior data in order to reach a final decision as to whether a student will be assigned to a class for the mentally retarded. If it can be reasonably concluded on the basis of the information developed by either category that the assignment may be inappropriate, then such assignment must not be made.

TESTING AND PLACEMENT OF MINORITY CHILDREN

Hobson v. Hanson 269 F. supp. 401 (1967)

Court:	U.S. District Court, District of Columbia
Plaintiffs:	Class action brought on behalf of Black school children in Washington, D.S.
Defendents:	Hanson - school superintendent, and other school officials
Legal Basis for Claim:	That the tracking system of educational placement operated individiously against Blacks and poor students, depriving them of an equal educational opportunity. As a result, this violated the equal protection clause of the 14th amendment of the United States Constitution.
Factual Issues Involved:	1. Whether the Stanford Achievement test and the Otls Test of Mental Ability were culturally biased. 2. Tracking led to unequal educational opportunities.
Harm Alleged to be Suffered:	Irreparable injury suffered by plaintiffs through inadequate education.
Relief Sought:	Injunctive relief against identification and placement procedures and compensatory damages.
Results:	Court found allegations to be true and the tracking system was abolished.

Diana v. State Board of Education C-70 37 RFT (Feb. 1970)

Court:	District Court of Northern California
Plaintiffs:	Diana and others. Class action suit on behalf of Mexican-American children in educable mentally retarded classrooms.
Defendants:	State Board of Education and various other California state and school officials.
Legal Basis for Claim:	That the standardized intelligence tests specifically the Stanford-Binet and Echsler were written entirely in English. They were given to children whose primary language was other than English. This violated the equal protection clause of the 14th amendment to the United States Constitution.
Factual issues involved:	Whether the intelligence tests used were culturally biased.
Harm Alleged to be Suffered:	Irreparable injury of inadequate education and stigma of mental retardation.
Relief Sought:	Injunctive and declaratory relief against identification and placement and compensatory damages.
Results:	The case was settled out of court with the following main points of agreement: 1. All children whose primary home language was other than English from now on had to be tested in both the primary language and in English. 2. Children may be tested only with tests or sections of tests that don't depend on such things as vocabulary, general information, and other similar unfair verbal questions. 3. Mexican-American and Chinese children already in classes for the mentally retarded had to be retested in their primary language and had to be reevaluated only as to their achievement on non-verbal tests or sections of tests.

4. Every school district was to submit to the state before the next school year a summary of retesting and reevaluation and a plan listing special supplemental individual training which would be provided to help each student back into the regular school classes.
5. School psychologists were to work on norming a new or revised I.Q. test to reflect Mexican-American culture. This test would be normed by giving it only to California Mexican-Americans so that Mexican-American children tested by judged only on how they compared to the performance of their peers, not the population as a whole.
6. In a school district which had a sufficient disparity between the percentage of Mexican-American students in their regular classes and its classes for the retarded had to submit an explanation citing the reasons for this disparity.
7. Competent school psychologists should administer individual intelligence tests in primary language or seek out an interpreter who may be either a psychology trainee or intern or some other employee of the school district.

Guadalupe v. Templ Elementary School District F. Aug., 1971

Court:	United States District Court of Arizona
Plaintiffs:	Class action suit on behalf of Mexican-Americans, Chicanos and Yaqui Indians.
Defendants:	Board of Education and school officials who have participated in the identification and placement practices for these youngsters.
Legal Basis for Claim:	As a result of placing Mexican-American, Chicano and Yaqui Indian children classified educably mentally retarded based on their scores on the intelligence tests written in English, children were denied the right to an equal educational opportunities and as a result this violated the equal protection clause of the 14th amendment. Additional violations cited regarded state laws and the Constitution of the State of Arizona.
Factual Issues Involved:	The standardized intelligence tests used to place these children in programs for the educable mentally retarded, the Stanford-Binet and Wechsler tests, were primarily written in English, therefore culturally biased. They were given to children whose primary language was other than English.
Harm Alleged to be Suffered:	Irreparable injury of inadequate education and stigma of mental retardation.
Relief Sought:	Compensatory damages and other such relief that the Court deems just and appropriate. Injunctive relief against identification and placement procedures and declaratory relief were also sought.
Results:	Stipulated agreement made on January 25, 1972. Permanent Regulations included the following points: 1. No child to be placed in a special education class for EMR if he scores higher than 2

standard deviations below norm on an approved I.Q. test in his own language. Tests shall not be either the exclusive or primary screening device in considering the child for placement in classes.

2. No child shall be considered for placement in special education unless given an examination of developmental cultural background, school achievement which substantiates other findings of a handicap. Exams must include a home visit with parental permission and an interview in the primary language of the family.
3. If a school district enrolls any children of any racially linquistic or ethnic group in special classes in proportions substantially greater or lesser than that of the population of the school district as a whole, the school shall demonstrate "compelling educational justification."
4. No child shall be considered for special placement unless the chief administrator consults the following: Parent or guardian; school principal, person responsible for conducting special education course; teacher currently instructing child; an appropriate professional advisor.
5. Parental approval in writing prior to placement required, with thorough explanation in the primary language. Opportunity for re-evaluation every semester at request of parents, withdrawal of consent at any time.
6. Parent or guardian giving permission shall have complete access to all school records on the child.

7. All children with prime langeage other than English and assigned to EMR classes or TMR, at this time will be reassigned to regular classes before Oct. 1, 1973.

8. Where evaluation under new regulations reveals previous misclassification as being handicapped, all records to this affect will be removed.

Decision-Stipulated Agreement

Guadalupe Organization v. the Tempe Elementary School District

The Guadalupe case has been settled out of court with a stipulated agreement. Following is a summary of what was agreed upon.

1. The primary language of the child is to be determined by the division of Special Education and the Chief School Administrator will attest to this in writing prior to the evaluation of the student for special education. If the child's primary language is determined to be other than English, three things happen:
   a. a psychologist fluent in both the child's primary language and in English will be made available.
   b. an interpreter is to assist the psychologist with the language during testing.
   c. test instruments are to be used which do not stress the spoken language but are considered valid and reliable measures of intellectual functioning.
2. The results of the tests and the decision for placement in special education will be explained to the parents in their primary language prior to placement.
3. All information regarding any handicapped status will be privileged and confidential.
4. No child is to be placed in a special education class with the educable mentally handicapped if he or she scores higher than two standard deviations below the norm on the approved non-verbal of the intelligence test given in the primary language (IQ range from 65-70 or above).
5. Intelligence tests are not to be exclusive or the primary screening device in considering a child's placement in classes for the handicapped.
6. No child is to be placed in classes for the handicapped children unless an examination of developmental history, cultural background, and school achievement substantiates other findings of educational handicaps. These are to include estimates of adaptive behavior. (See Mercer Adaptive Behavior)

145

Arreola v. the Board of Education 160 577 (1968)

Court:	Superior Court of the State of California for the County of Orange.
Plaintiffs:	Arreola and others. Class action suit on behalf of all Mexican-American children.
Defendants:	Board of Education, Santa Ana Unified School District
Legal Basis for Claim:	As a result of placing Mexican-American children classified educably mentally retarded based on their scores on intelligence tests written in English, children were denied a right to equal educational opportunities and as a result, this violated the equal protection clause of the 14th amendment. Additional legal claim was that if school were to place the children in classes for the educably mentally retarded without an opportunity for the parents of these children to show that they were not mentally retarded, this constituted a violation of the California educational code, the Constitution of the State of California and the due process clause of the 14th amendment to the United States Constitution.
Factual Issues Involved:	1. The mentally retarded classes that existed were inadequate. 2. The intelligence tests used were culturally biased. 3. The parents were not given an adequate opportunity to participate in the placement decision.
Harm Alleged to be Suffered:	Irreparable injury of inadequate education and stigma of mental retardation.
Relief Sought:	Injunctive relief against identification and placement, declaratory relief and compensatory damages.
Results:	This case has not been settled but it looks as if it has gone moot as a result of Diana and the changes in the California school code.

Spangler v. Board of Education 311 F. pp. 501 (1970)

Court:	Federal District Court of Southern California
Plaintiffs:	Black students in the Pasadena School System.
Defendants:	Board of Education of Pasadena.
Legal Basis for Claim:	That there was a racial imbalance in the student body at all levels. Part of the contention was that some of the racial imbalance was due to the use of various I.Q. tests.
Factual Issues Involved:	It was admitted without contest that the intelligence tests used were discriminatory.
Relief Sought:	Injunctive relief against identification and placement procedures and compensatory damages.
Results:	Tests were no longer used for placing students.

147

Larry P. v. Riles C-71-2270 Filed November 24, 1971

Court: U.S. District Court for Northern District of California

Plaintiffs: Class action suit brought by parents of seven children labeled mentally retarded partly on the basis of test scores which indicated that children had I.Q. scores of less than 75.

Defendants: Files, Superintendent of Public instruction in the State of California, members of the State Board of Education, the Superintendent of the San Francisco Unified School District and members of that Board of Education.

Legal Basis for Claim: The parents argue that they represent a class of Black Children in California wrongly placed and maintained in classes for the mentally retarded. The plaintiffs come from families in which the primary culture is Black-American. The spoken language and communication skills reflect such variations and differences from the so-called Standard English as is consistent with their cultural background. The claim arises out of the constitution and laws of the United States, including the 14th amendment to the U.S. Constitution and the Civil Rights Act of 1871, as amended in the Civil Rights Act of 1964. It also arises out of the Constitution and laws of the state of California, including the State Code, sections discussing equal education opportunities and education of mentally retarded minors.

Factual Issues Involved:

(1) The improper placement of plaintiffs due to the fact that they are not now and never have been mentally retarded. That they have been the victims of the testing procedures that fail to recognize their unfamiliarity with white middle class cultural background which ignores the learning experiences which they may have had in their homes.

(2) That the I.Q. test which they have been subject to places a heavy emphasis on verbal skills and fails to account for the plaintiffs' home experience or environment. These tests are the Stanford-Binet and Wechsler Intelligence Tests which were standardized only on white Anglo-American children and there has been no restandardization to date. Therefore, these tests do not properly assess those Black children.

(3) Classes for the mentally retarded teach minimal skills in reading, spelling and math, and do not provide the necessary competencies for these children to become economically useful and socially adjusted.

(4) Improper placement is stigma-producing and it causes the child to receive ridicule from his peers and produces a profound sense of inferiority and shame in the child.

(5) On the independent retesting of the plaintiffs between October 1970 and March 1971, the plaintiffs obtained I.Q. scores ranging between 79 and 104. Everyone of them had a score above 75, which is indicated in the State Code as the cut-off point.

(6) The defendants' own statistics from the San Francisco Bay Area show an overrepresentation of Black children in special education classes. 66% of the elementary children in special education classes are Black, while the Black population of the district is only 28.5%. Throughout the state Blacks comprise only 9.1% of the school-age children, and they represent 27.5% in programs for the mentally retarded.

(7) The plaintiffs are guarenteed a right to an equal educational opportunity in the state of California, with the rights and privileges thereto. Since these programs are inferior, these children have not been given an equal educational opportunity. In spite of the new regulations, effective October 1, 1971, which make some modifications of the current procedures utilized in EMR placement, there is neither provision for an adequate means to eliminate discrimination and error in such placement, nor is there an adequate remedy for the plaintiffs. The defendants do not make any meaningful efforts to insure that the psychological assessment in conducted and interpreted by a person adequately prepared to evaluate cultural factors, preferably a person of a similar ethnic background as the child being evaluated.

Harm Alleged to be Suffered: Irreparable damage of inadequate education and stigma of mental retardation will inevitably result in the plaintiffs' being cut off from social and economic gains available to children in regular school classes, and they will be forced to suffer the humiliation of reliance upon public assistance. This stigma attached to the EMR child is retained through notation on plaintiffs' records and files and actually widens the gap of learning.

Relief Sought: Injunctive and declaratory relief on the basis of the violation of Civil Rights, the plaintiffs are seeking the following: Enjoin defendants from performing psychological evaluation or assessment on the plaintiffs and other Black children by using group, individual ability or intelligence tests which do not properly account for the cultural background.

Enjoin the defendants from placing the plaintiffs and other Black children in classes for the mentally retarded. Enjoin plaintiffs from retaining plaintiffs and other Black children now in classes for the mentally retarded. Assess such children immediately and then annually reevaluate them and retest by means which properly account for cultural background and experience. Enjoin the plaintiffs from refusing to place plaintiffs in the regular class with children of comparable mental age and provide for the necessary intensive and supplementary training needed to catch up to their peers as rapidly as possible. Order plaintiffs to remove from the school record that these children were or are mentally retarded or were ever in the class for the mentally retarded. Require defendants to take necessary action to correct any discriminatory variance or bring about the appropriate distribution of Black children in classes for the mentally retarded more closely to their numbers in the total population of the school district. Require defendants to recruit and employ sufficient numbers of Black and other minority psychologists in local school districts. Finally, the plaintiffs ask that the costs of this suit and all relief deemed just by the court be effected until complete relief has been achieved.

Results: At this time there are no results in this case.

Larry P. v. Riles Addendum

(San Francisco Examiner, San Francisco Chronicle, June 22, 1972)

On June 21, 1972, the San Francisco Unified School District was ordered by U.S. District Court Judge Robert F. Peckman to stop using I.Q. tests as the main criteria for placing blacks in classes for the mentally retarded.

Judge Peckman issued a temporary injunction. He noted that while blacks constituted 28.5% of all students in the district, 66% of all students in mentally retarded classes are black, " a disproportionate amount". Until further orders of this court, Judge Peckman stated, "No black students may be placed in a class for the mentally retarded on the basis of criteria, which are primarily based on I.Q. tests as they were currently administered if the consequent use of such criteria is racial imbalance in the constitution of such classes."

The suit also sought to stop all I.Q. testing (State Education code requires it). This Judge Peckman did not deal with. He indicated that since the purpose of a preliminary injunction is to cure the last status quo prior to the institution of litigation, primarily relief will be granted as to future testing and future evaluation only. Thus black students who are currently in classes for the mentally retarded may be retained there. But the yearly reevaluations must be conducted by means which do not deprive them of equal protection of the law.

The plaintiffs had also indicated their desire to have those students wrongfully placed in such classes removed immediately and supplementary education be provided as well as the recommendation to hire more black psychologists and establish a ceiling on the number of blacks in such classes. Judge Peckman said relief at this time was not appropriate on these issues listed above. Compensation for misplacement was also not given.

Judge Peckman also indicated that yearly evaluations must take place immediately and that schools may not postpone such placement on the basis of waiting for the development of an unbiased test. He suggested that other means be found for placing black children in mentally retarded classes, such as tests by black psychologists, who he said would be sensitive to eliminate cultural bias.

MEXICAN-AMERICAN BOYS AGE 5

EXPECTED	NORM	MEX-AM	
Head	100	100	
Eyes	98	100	
Nose	87	82	
Mouth	92	91	
Body	89	87	
Legs	97	94	
COMMON			
Arms	84	77	
Feet	73	73	
Fingers	61	54	
Hair	54	79	***
NOT UNUSUAL			
Arms 2d	48	43	
Legs 2d	37	38	
Arms Down	21	15	
Neck	28	13	
Hands	33	36	
Ears	25	43	***
Eyebrows	21	10	
EXCEPTIONAL			
Pupils	11	23	**
Feet 2d	8	8	
5 Fingers	13	6	
Arm Att Sh	3	3	
Prop	2	2	
Nostrils	2	4	
Profile	1	0	
Elbow	1	0	
Two lips	2	0	
Knee	0	0	
Feet Full Face Belly Buttons	2		
CLOTHING			
0-1 Items	90	91	
2-3 Items	9		
4 items	1	0	

* .05
** .01
*** .001

MEXICAN AMERICAN - MALES AGE 6

N=100

EXPECTED	NORM	MEX-AM	
			* .05
			** .01
			*** .001
Head	100	100	
Eyes	99	100	
Nose	91	91	
Mouth	97	100	
Body	97	87	
Legs	98	98	
Arms	95	97	
COMMON			
Feet	80	86	
Fingers	60	77	***
Hair	72	88	***
Arms 2d	62	79	***
Legs 2d	70	72	
NOT UNUSUAL			
Arms Down	35	48	**
Neck	27	37	**
Hands	42	41	
Ears	33	50	***
Eyebrows	28	31	
Pupils	22	34	**
Feet 2d	22	26	
5 Fingers	26	21	
EXCEPTIONAL			
Arms A.S	14	28	**
Proportion	5	15	**
Nostrils	5	18	***
Profile	3	1	
Elbow	6	2	
Two Lips	2	1	
Knees	3	2	
(Feet Full Face 14)			
CLOTHING			
0-1 item	70	53	
2-3 items	25	42	***
4 items	5	5	

MEXICAN AMERICAN BOYS AGE- 7

N=100

EXPECTED	NORM N=134	MEXICAN Am N=100	
Head	100	100	
Eyes	99	100	
Nose	90	97	
Mouth	97	99	
Body	98	100	
Legs	99	99	
Arms	96	98	
Feet	87	99	***
Arms	86	84	
COMMON			
Legs 2d	84	83	
Hair	76	94	***
Arms Down	57	42	
Neck	55	61	**
Fingers	76	83	***
NOT UNUSUAL			
Hands	50	50	
Ear	42	47	*
Eyebrow	37	37	
Pupils	38	36	
Feet 2d	43	53	**
5 Fingers	38	28	
Arms At Sh	24	23	
Prop.	23	31	*
EXCEPTIONAL			
Profile	15	1	**
Nostrils	10	7	
Elbow	4	2	
Two Lips	6	6	
Knee	1	2	

FEET FULL FACE = 18

CLOTHING			
0-1 Item	46	45	
2-3 Items	31	44	**
4 Items	23	11	

MEXICAN-AMERICAN MALE AGE - 8

N = 100

EXPECTED	NORM	MEXICAN AM	* .05 ** .01 *** .001
Head	100	100	
Eyes	99	99	
Nose	94	95	
Mouth	95	100	
Body	99	99	
Legs	97	100	
Arms	96	100	
Feet	86	90	
Arms 2d	96	99	
Legs 2d	93	98	
COMMON			
Hair	78	97 ***	
Arms Down	71	62	
Neck	60	64	
Fingers	72	88 ***	
Hands	55	63 ***	
NOT UNUSUAL			
Ears	40	53 ***	
Eyebrows	37	32	
Pupils	38	52 ***	
Feet 2d	50	27	
5 Fingers	40	38	
Arm Attached at Should	40	50 **	
Prop	26	44 ***	
Profile	25	3 ***	
EXCEPTIONAL			
Nostrils	15	11	
Elbow	11	4	
Two lips	8	2	
Knee	4	3	
FEET FULL FACE 10			
BELLY BUTTONS 3			
CLOTHING			
0-1	37	36	
2-3	37	49 ***	
4	26	15	

MEXICAN AMERICAN MALE AGE-9

EXPECTED	NORM	MEX-AM	* .05 ** .01 *** .001
Head	100	100	
Eyes	100	100	
Nose	100	100	
Mouth	99	99	
Body	100	98	
Legs	99	97	
Arms	100	96	
Feet	90	91	
Arms 2d	98	94	
Legs 2d	98	94	
COMMON			
Hair	81	97 ***	
Arms down	78	71	
Neck	81	74	
Fingers	81	89	
Hands	70	57	
Arms Att Sh	52	53	
Ears	59	55	
Feet 2d	69	17 ***	
Pupils	56	56	
NOT UNUSUAL			
5 Fingers	50	48	
Eyebrow	42	42	
Prop	31	43 **	
EXCEPTIONAL			
Nostrils	15	15	
Elbow	15	5	
2 Lips	8	13	
Knee	10	3	
Profile		3	

Feet Full Face = 10

Belly Button =